

Section 9: Epidemiologic Profile of the District of Columbia

Prepared for the
District of Columbia
HIV Prevention Community Planning Group
by the
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Data and Research Division
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Introduction

This report was prepared for the District of Columbia HIV Prevention Community Planning Group as part of a comprehensive plan for targeting HIV prevention services in the District. HIV prevention community planning is a fundamental component of health department HIV prevention programs funded by the Centers for Disease Control. The goals of community planning are to improve the effectiveness of HIV prevention programs through participation of individuals infected and affected by HIV, and application of sound, scientific methods that will halt the spread of HIV infection.ⁱ This process “combines the best of both worlds by joining local community based prevention advocates with prevention scientists (epidemiologists, behavioral scientists, evaluation specialists, etc. The end result should be:

- ❑ **A scientific process that is validated by community participation.**
- ❑ **A community driven process that is validated scientifically and empowered through funded resources.”ⁱⁱ**

With these goals in mind, the data presented in this document are intended to support the process of establishing priorities and strategies for HIV prevention programs in the District of Columbia.

This report is divided into four sections. Section I (Sociodemographic Profile) provides a statistical overview of some pertinent characteristics of the District’s population. Section II (Summary of AIDS Trends by Ward) describes the epidemic and associated risk behaviors by Ward. Section III (Overview of HIV/AIDS in Selected Populations) describes trends in the AIDS epidemic in selected populations. Section IV provides information on surrogate markers for HIV infection. Surrogate markers are substitute measures that are used to profile health trends when actual data are not available or difficult to obtain. In the case of HIV infection, important surrogate markers include data on Sexually Transmitted Diseases, Teen Pregnancy and Substance Addiction. These data are useful because they provide indicators of HIV risk behavior in a population, irrespective of reported HIV or AIDS cases.

How do these data inform the process of HIV prevention community planning?

Community planning is a dynamic process that determines priorities and interventions based on identified needs. To accomplish this, the planning group begins by reviewing epidemiologic data from a variety of sources to define the *distribution* of HIV infection (e.g.: which populations and regions are affected), and *determinants* of HIV infection (in this case, behavioral and psychosocial factors that facilitate the spread of infection).

Defining populations, regions, and factors that facilitate the spread of HIV is the foundation of the planning process. With this information, the planning group can better prioritize populations and regions in need of prevention services, identify intervention strategies, as well as defining priorities for further needs assessment research.

The District of Columbia in Context

With of 572,059 residents, the District of Columbia ranks 21st in population size among US cities, according to the 2000 Census. The District lost 5.7% of its population between 1990 and 2000. A majority of the population is American/Black (60%). Non-Hispanic Whites comprise 27.8%. Hispanics/Latinos are 7.9%; 2.8% of the population is Asian or Pacific Islander.

A survey of state HIV/AIDS surveillance coordinatorsⁱⁱⁱ representing 40 US cities found that the District of Columbia ranked 1st in AIDS incidence in 2000, with 132 cases per 100,000 population. Data for the 6 highest ranking cities are shown in Table 1 (Below)

Table 1.
AIDS Incidence per 100,000 Population in
Selected US Cities.

City	
Washington, DC	132
Atlanta, GA	125
Baltimore, MD	116
San Francisco, CA	74
Philadelphia, PA	71
New York, NY	56

Mean annual AIDS incidence rate for the 2 year period

The District of Columbia's first AIDS case was reported to the Centers for Disease Control in 1981. Through December 31, 2001, 13,899 cases were reported among District of Columbia residents. Forty seven percent of these have died, (n=6481), leaving 7418 living as of that date. Between 1995 and 2000, AIDS incidence in the District declined 42%, due to advancements in medical treatment.

As a result of the success of treatment advances, people are living longer with AIDS. The number of people living with AIDS in the District of Columbia more than doubled between 1995 and 2001. Compared to the 7,418 people living with AIDS as of December 2001, 3406 were living with AIDS, as of December 1995. Current trends suggest that these numbers will continue to grow, increasing the need for HIV prevention, healthcare, and support services.

The success of treatment advances also means that people are living longer with HIV without developing AIDS. Historically, counting the number of AIDS cases and describing the characteristics of newly diagnosed cases provided a "snapshot" of the epidemic that was useful for planning services. As fewer individuals with HIV are progressing to AIDS defining illness, the Centers for Disease Control has recommended that Health Departments expand their AIDS surveillance systems to include reporting of HIV infection.

We estimate that between 12,000 and 14,000 District of Columbia residents are living with HIV in addition to the 7,418 living with AIDS. This is a provisional estimate, as it is a local extrapolation of the national estimate from the Centers for Disease Control. Reporting of HIV infection was implemented in the District in December 2001. This system will increase our ability to estimate HIV infection in the District as well as describing the extent of HIV in specific populations. The present report will focus primarily on AIDS case data, with supplemental information from the Census, surrogate markers and other data sources.

Sociodemographic Profile

The District of Columbia population is divided into eight Wards, representing a diverse profile of demographic characteristics as well as health trends in general. Table 2 (below) describes the population of each Ward, along with pertinent demographic characteristics.

Table 2. DC Population at a Glance

Ward	2000 Population						Unemployment 2001	Median Household Income 1998	Per Capita Income 1998
	#	%	Increase since 1990	% population under 18	Female to Male ratio among adults	Population per Sq. Mile			
1	80014	14.0%	0.5%	17.0%	1 to 1	29234	5.5%	\$38,533	\$25,983
2	82845	14.5%	5.2%	10.6%	1 to .99	11808	5.0%	\$46,732	\$39,225
3	79566	13.9%	2.3%	12.9%	1 to .77	7735	2.0%	\$79,832	\$63,340
4	71393	12.5%	-9.0%	20.6%	1 to .83	7935	5.7%	\$45,826	\$24,566
5	66548	11.6%	-11.3%	21.8%	1 to .81	7940	7.8%	\$34,902	\$20,528
6	65457	11.4%	-9.2%	13.7%	1 to .96	6546	6.9%	\$45,999	\$27,800
7	64704	11.3%	-11.3%	27.9%	1 to .71	11453	7.0%	\$32,952	\$17,743
8	61532	10.8%	-14.8%	36.7%	1 to .71	8127	11.3%	\$27,937	\$12,651
Total	572059	100.0%	-5.7%	20.1%	1 to .86	9316	6.1%	\$43,011	\$29,383

Summary of Population Characteristics

Population Size

The largest population is found in Ward two (82,845), followed by Ward one (80,014). The remaining Wards (four through eight) follow in rank order. The smallest population is found in Ward eight (61,532)

Population Growth

Between 1990 and 2000, the District of Columbia lost 5.7% of its population according to the 2000 Census. Ward eight lead the District in population decline, (-14.8%) followed by Wards five and seven (-11.3% each), and Wards four and six (-9% and -9.3% respectively). The population grew in Wards two (+ 5.2%), three (+2.3%), and one (+0.5%).

Percent Population Under 18

While 20.1% of the District's population overall is under 18 years of age, the proportion of population in this age group varies considerably by Ward. Ward 8 has the largest proportion in this age group (36.7%), followed by Ward 7 (27.9%). In contrast, Wards 2 (10.6%) Ward 3 (12.9%) and Ward 6 (13.7%) have the smallest proportions. Ward 4 (20.6%), and Ward 5 (21.8%) approximate the overall District percentage of 20.1%, while Ward 1 (17%) has slightly less.

Female to Male Ratio Among Adult Residents

In Wards 1, 2 and 6, the adult population is almost equally divided between females and males, as indicated by ratio of approximately 1 to 1 in these Wards. In Wards 3, 7 and 8, females outnumber males by a ratio of approximately 1 to .7 (one female for every .7 males). In Wards 4 and 5, the female to male ratio is approximately one female for every .8 males.

Population per Square Mile (Population Density)

Ward 1 is by far the most densely populated Ward in the District with 29,234 people per square mile, compared to overall population density of 9316 people per square mile in the District of Columbia. In contrast, Ward 6 has 6546 people per square mile. All of the remaining Wards range between 7735 and 11,808 people per square mile.

Selected Sociodemographic Factors:

Median Household Income, Per Capita Income, and Unemployment

Ward three had the highest median household income (\$79,832) and the lowest rate of unemployment (2%). In contrast, Wards five (\$34,902) seven (\$32,952) and eight (\$27,937) had the lowest median family income. These Wards also had the highest unemployment rates (7.8%, 7.0% and 11.3% respectively). Wards one, two, and four all had unemployment rates in the range of the District average of 6%). Median household incomes in these Wards were also in the range of the District average (\$43,011).

Summary Of AIDS Trends by Ward

Table 3. AIDS Case Data

Ward	Cumulative AIDS Incidence December 31st 2001		"Recent" AIDS Incidence (1996-2000)		Recent AIDS Incidence Selected Risk Indicators						
	#	%	#	%	Rate	Decline in new cases since HAART	Female to Male Ratio (Adult cases)	% Cases among Injecting Drug Users	% Cases Related to IDU through sex or childbirth	% Cases Heterosexual sex w/ a person with HIV; risk unspecified	MSM Total (including MSM/IDU)
1	2428	17.5%	662	15.4%	100	40.6%	1 to 3.5	23.3%	4.5%	17.1%	50.2%
2	2253	16.2%	552	12.9%	75	48.1%	1 to 4.4	20.8%	3.9%	12.4%	59.0%
3	465	3.3%	75	1.7%	11	60.0%	1 to 7.3	6.7%	2.7%	13.3%	72.0%
4	1297	9.3%	406	9.5%	72	44.6%	1 to 3	32.5%	6.0%	15.6%	42.2%
5	1657	11.9%	547	12.7%	105	51.0%	1 to 3.7	35.0%	8.0%	16.6%	36.2%
6	1963	14.1%	582	13.6%	110	45.4%	1 to 3.2	30.4%	6.9%	15.7%	43.8%
7	1156	8.3%	447	10.4%	96	37.6%	1 to 1.4	43.8%	8.6%	21.5%	22.1%
8	1257	9.0%	499	11.6%	128	8.1%	1 to 1.3	43.2%	9.7%	23.1%	19.8%
Total	13899	100.0%	4295	100.0%	94	44.5%	1 to 3	31.3%	6.5%	17.2%	40.9%

Excludes 1227 cases that were incarcerated, homeless, or residence unknown. Incarcerated and homeless are detailed on page 35.

AIDS CASE DATA&&

Table 3 describes each Ward in terms of AIDS case trends and selected risk indicators. The overall distribution of AIDS cases by Ward is similar to population distribution with some notable exceptions. Ward 3 accounts for 13.9% of the population, but only 3.4% of cumulative AIDS incidence. Among recently diagnosed cases, the proportion in Ward 3 decreases to 1.7%.

The proportion of recently diagnosed cases in Wards one (15.4%) and two, (12.9%) is slightly smaller than the proportion of cases in these Wards over the entire twenty years of Cumulative AIDS incidence (1981-2001). Ward one accounts for 17.7% of AIDS incidence over the twenty-year period, while Ward two accounts for 16.4%. In contrast, Wards seven and eight account for a larger proportion of AIDS incidence among recent cases (10.4% and 11.6% respectively), as compared to cumulative AIDS incidence (8.3% for Ward eight and 9.1% for Ward nine). In Wards five, six, and seven, the proportion of AIDS incidence remains relatively unchanged between the two periods.

AIDS Incidence Rates

Among recently diagnosed cases, rates of AIDS incidence were highest in Ward eight (128 cases per 10,000 population), followed by Wards six, (110 cases per 10,000 population) Ward five, (105 cases per 10,000 population, and Ward one (100, cases per 10,000 population). Ward 3 (11 cases per 10,000 population) had the lowest rate, followed by Ward 4 (72 cases per 10,000 population) and Ward 2 (75 cases per 10,000 population). The rate in Ward 7 was 96 cases per 10,000 population.

What do the numbers mean?

Cumulative AIDS Incidence

The total number of AIDS cases diagnosed in a particular area from the beginning of AIDS case reporting until a specified date (alive or deceased). In this case, data are provided through December 30th 2001.

Recent AIDS Incidence

The total number of AIDS cases reported between 1996 and 2001. Data for this period are presented in order to show how the epidemic has impacted different Wards since new treatments became available.

AIDS Incidence Rate

The per capita rate of new cases per 10,000 residents, computed as follows: In the District of Columbia, 4295 AIDS cases were diagnosed between 1996 and 2000. The District of Columbia Adult Population in 2000 was 572,059. 4295 cases divided by 457,067 residents = 9.4 cases per 10,000 residents. The AIDS incidence rate is a measure of a population's risk for developing AIDS.

Decline in recent AIDS incidence

The difference between the number of cases diagnosed in 1995 (the year before new treatments became available) and 2000 (the most recent year for which AIDS case reporting is relatively complete). For example, in the District of Columbia, 1062 cases were diagnosed in 1995. 616 cases were reported in 2000. $1062 - 616 = 446$. 446 is 42% of 1062

Female to Male Ratio among recent cases (1996-2000)

This is a measure of the spread of HIV to the community "at large," as well as the potential for future spread.

Both in the District of Columbia and nationwide, the female to male ratio has decreased over time. Among District of Columbia cases diagnosed during the 1980s, the female to male ratio was 1 to 13 (one female case for every thirteen male cases). Between 1996 and 2000 the female to male ratio in the District of Columbia was 1 to 3 (one female case for every three male cases.) In other words, the proportion of female cases has increased over time. The female to male ratio varies substantially between the eight Wards of the District.

SELECTED RISK INDICATORS AMONG RECENTLY DIAGNOSED CASES (1996-2000)

Decline in new cases since HAART

(Highly Active Antiretroviral Therapy)

AIDS incidence declined 44.5% in the District overall. The proportion of decline was highest in Ward 3 (60%), and lowest in Ward eight (8.1%). The remaining Wards of the District had rates of decline that approximated the overall District rate of 44.5%: Ward one (40.6%); Ward two (48.1%); Ward four (44.6%); Ward 5 (51.0%); and Ward six (45.4%).

Percent recent cases among heterosexuals

More than half of recent AIDS incidence in the District of Columbia occurred among heterosexuals (51.4%). The proportion was lowest in Ward 3 (20%), followed by Ward 3 (35.3%). Ward seven (67.8%) and Ward eight (65.6%) had the highest proportions of recent AIDS incidence among heterosexuals. Remaining wards were as follows: Ward 1 (40.7%); Ward four (48%); Ward five (53.6%); Ward 6 (47.6%).

Female to Male Ratio

The female to male ratio was highest in Ward three (1 to 7.3), followed by Ward two (1 to 4.4). The female to male ratio was lowest in Wards seven (1 to 1.4), and Ward eight (1 to 1.3). The remaining Wards of the District had female to male ratios similar to the District-wide average of 1 to 3: Ward one (1 to 3.5); Ward four (1 to 3); Ward five (1 to 3.7); Ward 6 (1 to 3.2).

Percent recent cases among Injecting Drug Users (IDUs)

Nearly one third (31.3%) of AIDS cases during this period were diagnosed in heterosexuals with a history of injecting drug use. However, the proportion of cases in this category varies widely by Ward. The proportion of IDU cases was highest by Ward 7 (43.8%) and Ward 8 (43.2%). The proportion of IDU cases in Wards 4,5, and six ranged between 30% and 33%. The proportion of IDU cases was smallest in Ward3 (6.7%), followed by Ward 2 (20.8%) and Ward 1 (23.3%)

Editorial note:

AIDS cases are counted once in a hierarchy of exposure categories. The hierarchy is summarized on page 10. The following describes selected details of exposure categories as used in this section.

Percent cases MSM (including MSM/IDU)

MSM includes all male cases with a history of male-to-male sex, regardless of other reported risks. MSM/IDU includes MSM with a history of IDU

Percent of recent (1996-2001) cases among heterosexuals with a history of injecting drug use.

This is the percent of cases diagnosed among persons who report no history of male-to-male sex who reported a history of injecting drug use.

Percent of recent cases related to IDU through sex or childbirth.

This category includes the following:

1. Males reporting no history of MSM or IDU and females who report a history of sexual contact with an injecting drug user
2. Perinatal cases born to mothers with a history of injecting drug use
3. Perinatal Cases born to mothers with a history of sex with a male IDU.

Percent cases heterosexual sex with a person with HIV, partner risk unspecified.

This category includes the following persons without a history of MSM or IDU who report sexual contact with a person of the opposite sex who is living with HIV/AIDS. Heterosexual cases are only counted in this category if they do not specify partner's risk behavior.

Percent cases related to IDU through sex or childbirth

The largest percentage of cases related to IDU through sex or childbirth was found in Ward 8 (9.7%, followed by Ward 7 (8.6%), and Ward 5 (8%). Ward 4 (6%) and Ward 6 (6.9%), were similar to the city-wide average of 6.5%. The percentage was lowest in Wards 3 (2.7%), Ward 2 (3.9%), and Ward 1 (4.5%).

Percent cases heterosexual sex with a person with HIV, partner risk unspecified.

The largest percentage of cases attributed to heterosexual contact with a person with HIV in which partner risk was unspecified were reported among residents of Wards 8 (23.1% and Ward 7 (21.5%), followed by Ward 1 (17.1%) Ward 5 (16.6%), Ward 6 (15.7%), and Ward 4 (15.6%). The proportion of cases in this category was lowest in Wards 2 (12.4%) and Ward 3 (13.3%).

Percent cases MSM (including MSM/IDU)

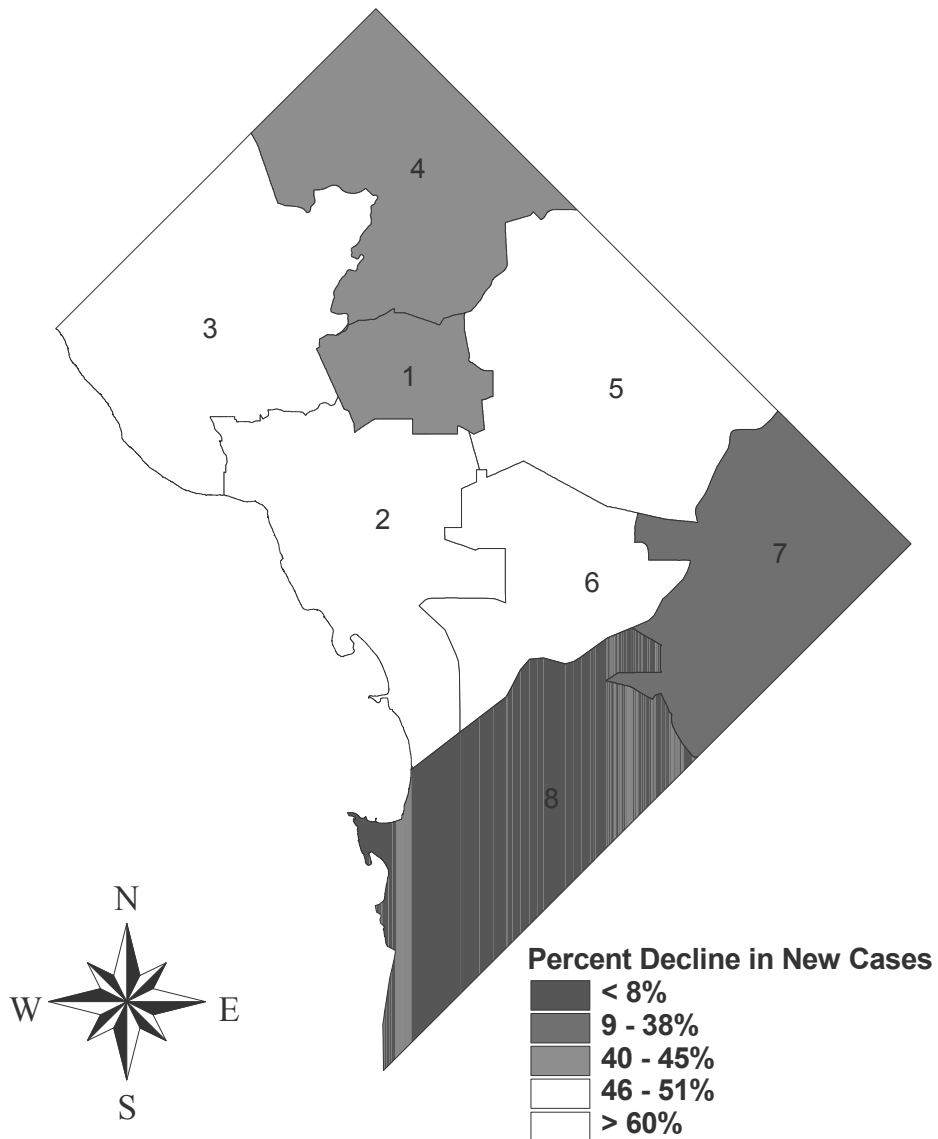
The largest proportion of MSM cases were reported among residents of Ward 3 (72%), followed by Ward 2 (50%) and Ward 1 (50.2%). Ward 4 cases were 42.2% MSM, while cases in Ward 6 were 43.8% MSM. The smallest proportion of MSM cases were reported among residents of Ward 8 (19.8%), and Ward 7 (22.1%). The proportion of MSM cases in Ward 5 was 42.2%.

Conclusion:

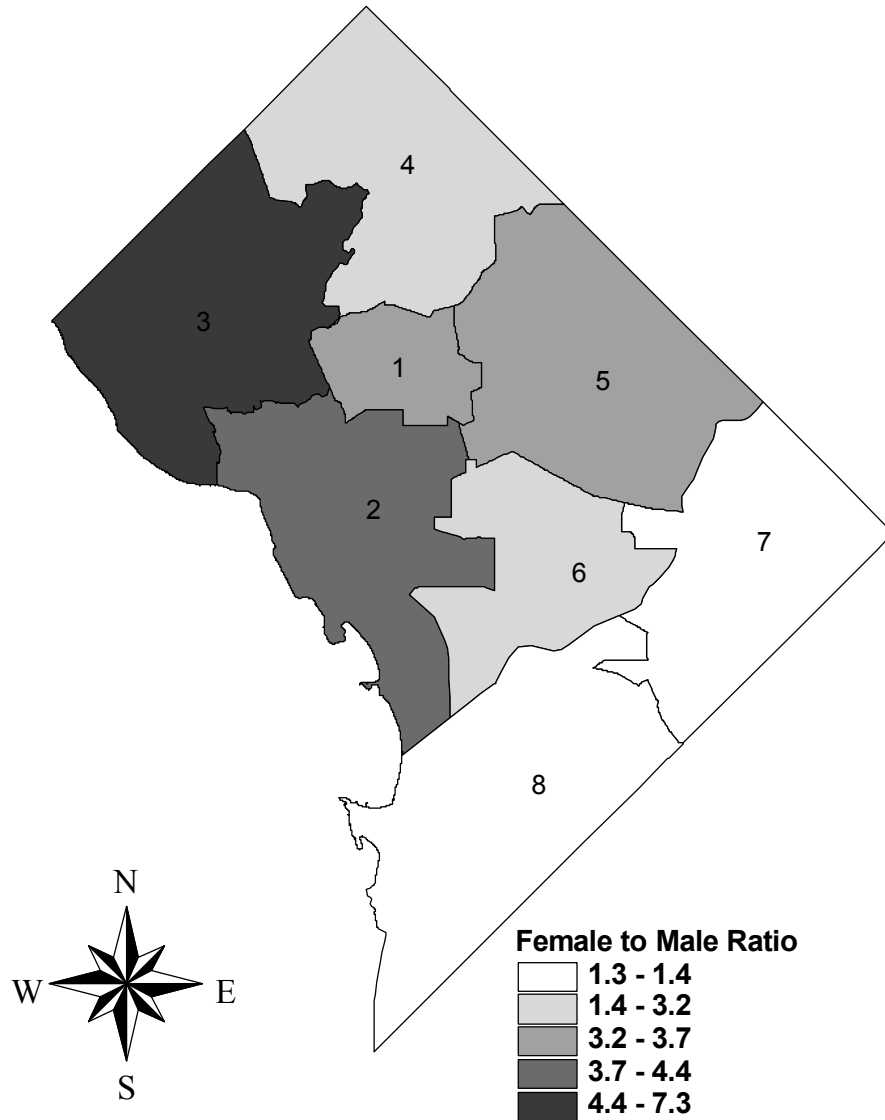
Geographic analysis of AIDS case data indicates a consistent pattern of HIV transmission: The largest proportions of female cases (as indicated by the female to male ratio) are found in Wards 7 and 8 where the predominant modes of HIV transmission are IDU and heterosexual contact. In contrast, areas where MSM is the predominant mode of transmission, such as Wards 2 and 3 have the smallest proportions of female cases. These areas also have the lowest rates of AIDS incidence. These findings are consistent with historical patterns of HIV transmission nationwide:

- ❑ Regions with the highest rates among women have a history of IDU as a predominant mode of HIV transmission¹
- ❑ In the United States, the first evidence that HIV could be transmitted via heterosexual contact was appearance of AIDS related opportunistic infections in non-IDU female sexual partners of male IDUs².

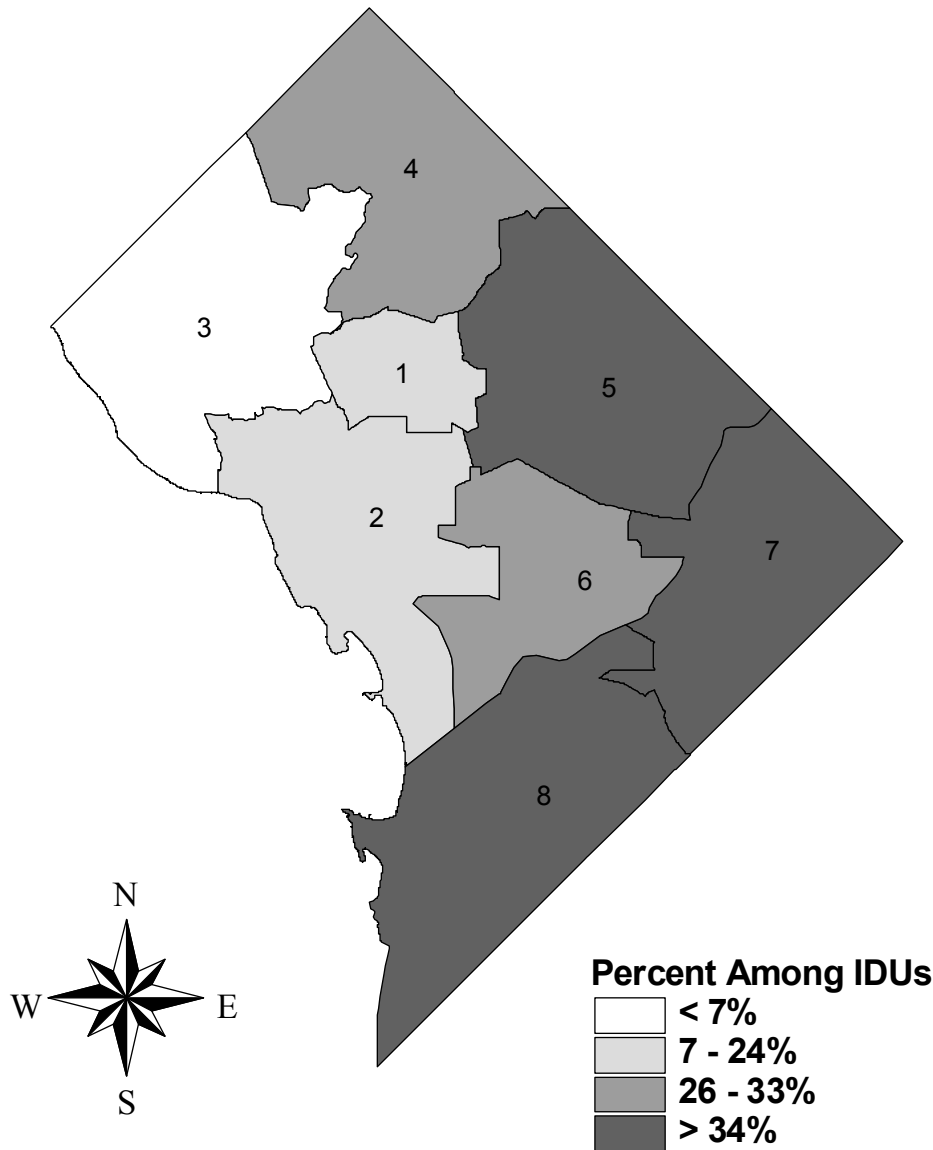
**AIDS Incidence:
Percent Decline in New AIDS Since HAART Treatments,
Washington, DC**



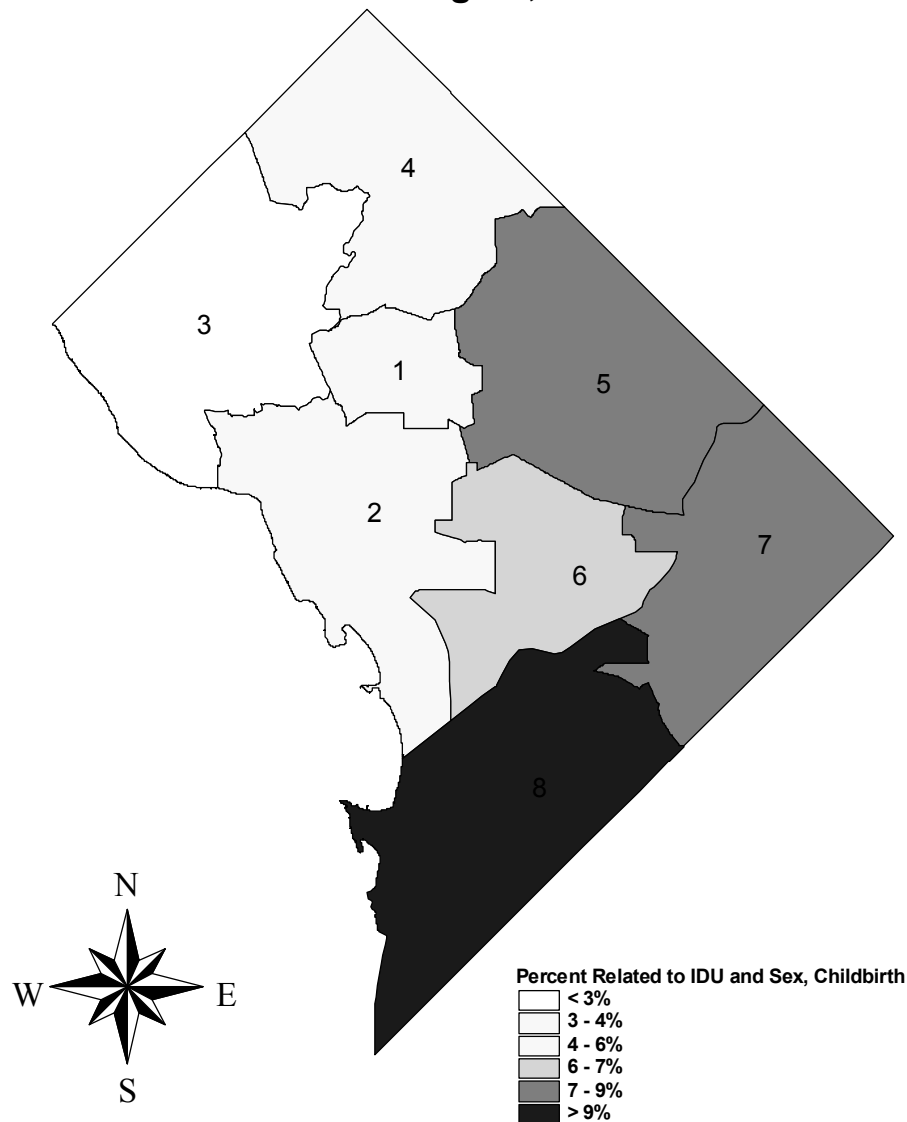
**AIDS Incidence:
Female to Male Ratio,
Washington, DC**



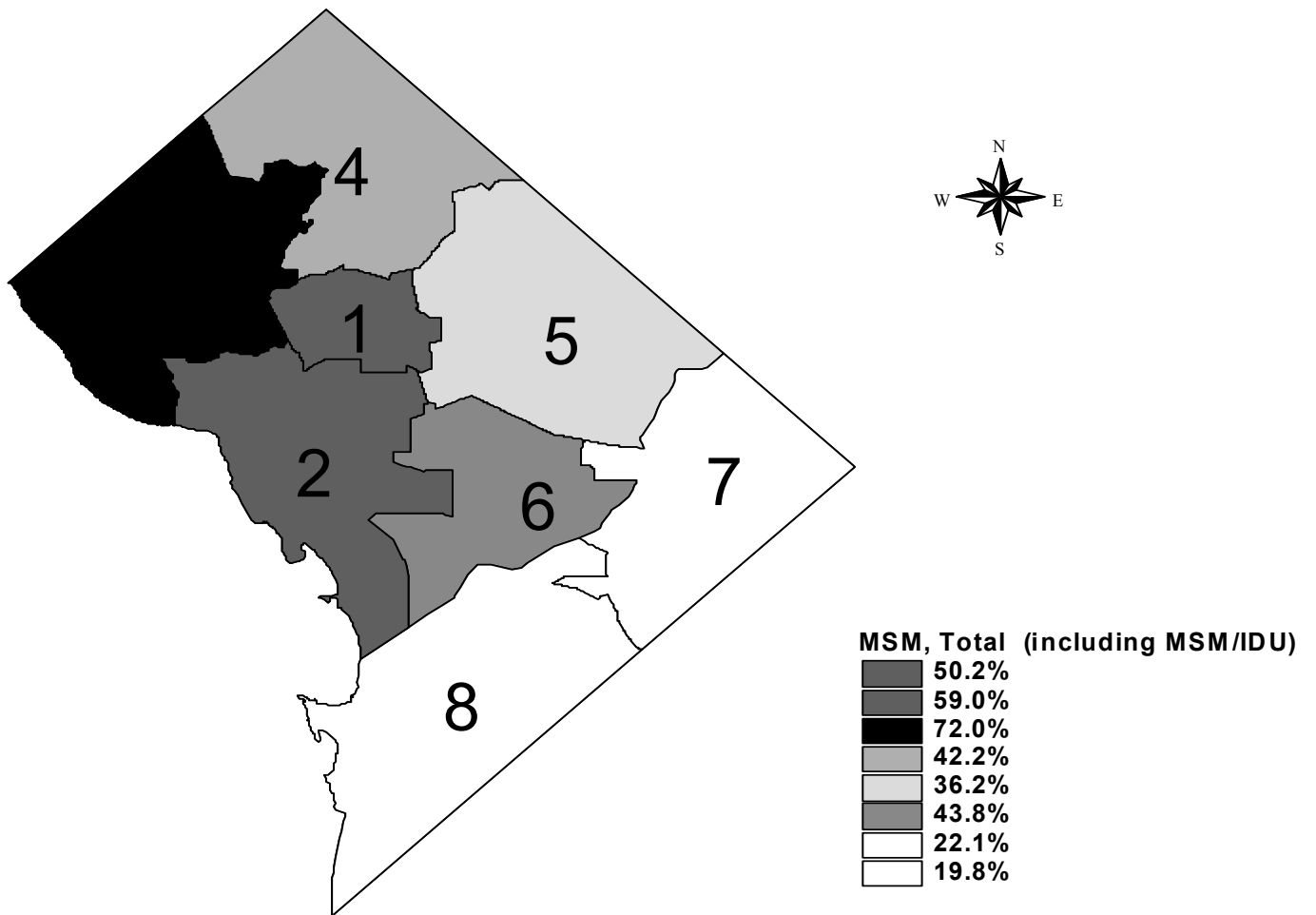
**AIDS Incidence:
Percent Cases Among Injecting Drug Users,
Washington, DC**



**AIDS Incidence:
Percent Cases Related to Injecting Drug Users,
Transmission by Sex or Childbirth
Washington, DC**



**AIDS Incidence:
Percent Cases, MSM Total (Including MSM/IDU)
Washington, DC**



Trends in AIDS Incidence

The District of Columbia's first AIDS case was reported in 1981. Through December 31, 2001, a total of 13,899 cases had been reported among District of Columbia residents. Forty seven percent of these have died, (n=6481), leaving 7418 living as of that date.

Since 1996, the number of new cases has declined almost every year, due to treatment advances. Between 1995 (1062 cases) and 2000 (616 cases), AIDS incidence in adults declined by 42%. The percent decline was largest in White males (64.2%), followed by African American/Black Males (45.8%), Hispanic/Latino Males (31%), and African American/Black Females (21.5%).

The number of cases among White Females, Hispanic/Latina Females, and Asian/Pacific Islander males and Females was too small to analyze each group separately. However, it is noteworthy that among these groups combined, the proportion of cases actually grew; an aggregate total of 20 cases were reported among these groups in 2000, compared to 15 in 1995.

Figure 1.

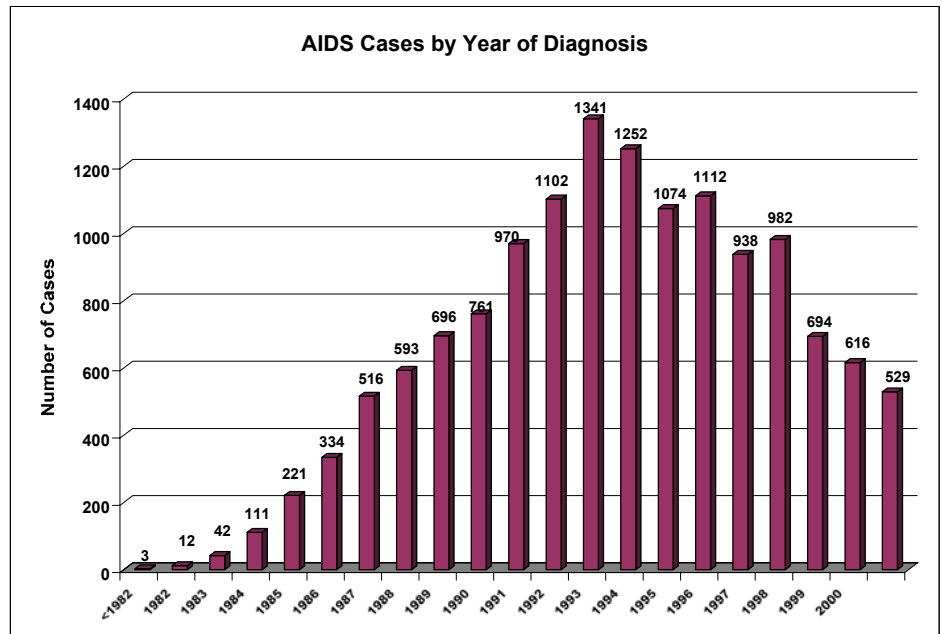


Table 4. Decline in AIDS Incidence

	1995	2000	Difference	
	#	#	#	%
African American/Black Males	640	347	293	45.8%
African American/Black Females	219	172	47	21.5%
White Males	159	57	102	64.2%
Hispanic/Latino Males	29	20	9	31.0%
All Other Adult Males and Females	15	20	-5	-33.3%
Total Adult Cases	1062	616	446	42.0%

AIDS Incidence by Mode of Transmission

HIV Exposure Categories established by the Centers for Disease Control

MSM (men who have sex with men - any male with a history of male to male sex, irrespective of identity)

IDU (history of injecting drug use)

MSM/IDU (MSM with a history of injecting drug use)

Heterosexual contact ("heterosexuals" with no history of IDU who report history of sex with a person with HIV or with an "at risk person" as defined herein.)

Blood/Blood Products (includes recipients of blood transfusions, transplants, etc, as well as people with Hemophilia). Extremely rare since 1985.

No Identified Risk (includes individuals who do not acknowledge a risk history as defined herein, as well as individuals who have not been interviewed. Also includes people whose only acknowledged risk is heterosexual contact that did not specify sex with a person with HIV or a person at risk as defined herein.)

Figure 2

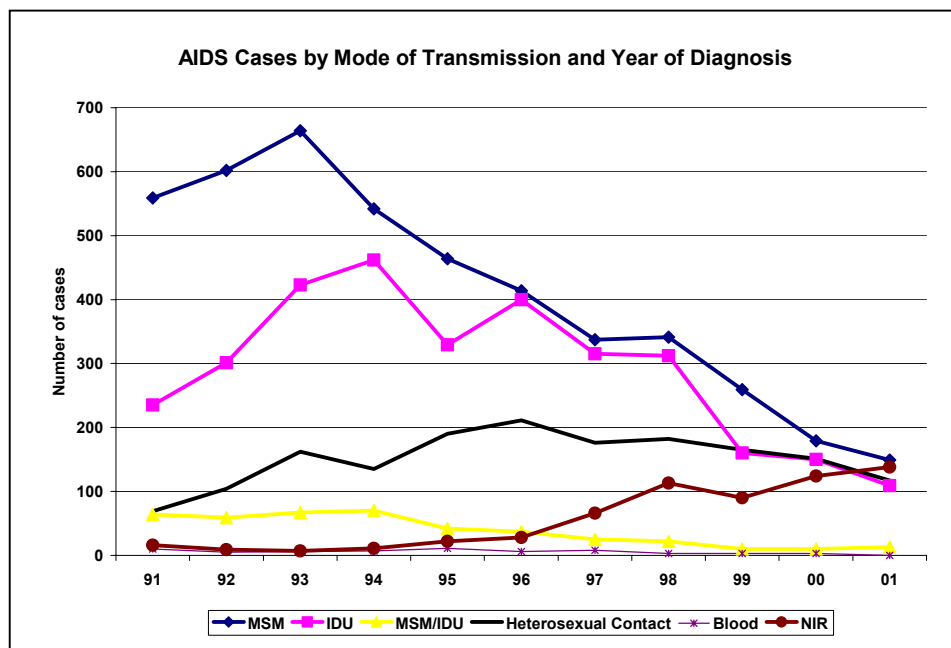


Figure 3.

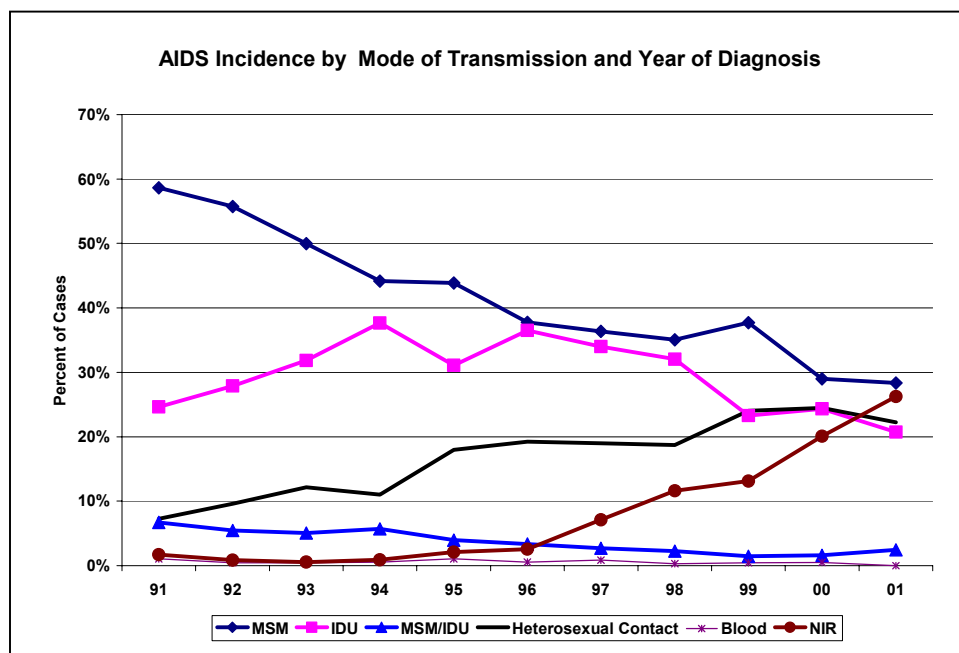


Figure 4

Figures 2-4 present AIDS trends by mode of transmission for cases diagnosed between 1991 and 2001. Figure 5 shows the *number* of cases diagnosed each year. The *number* of cases among MSM and IDU declined dramatically during this period. The *number* of cases attributed to heterosexual contact increased significantly during the first half of the decade, before leveling off to an apparent decline nationwide.

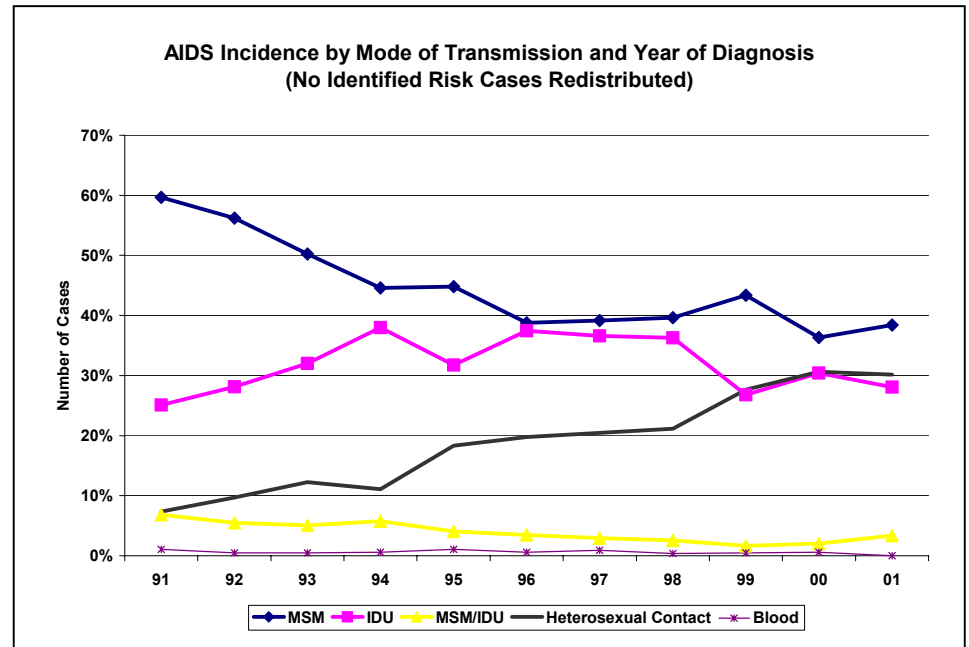


Figure 3 presents the same data using percentages instead of numbers. This picture shows that prior to 1995, the proportion of cases among MSM declined, while cases among IDUs and heterosexual contact increased. After 1996, the trends are difficult to interpret, since cases with no identified risk account for such a large proportion. Before 1996, the proportion of cases without identified risk accounted for a negligible proportion of cases. Subsequently, the number of cases in this category increased dramatically each year, both in the District of Columbia and nationwide. National reports have attributed this increase to several factors:

❑ **“Unrecognized” Heterosexual Transmission:**

According to the CDC cases classified as “Heterosexual Contact must specify sex with a person that has a history of injecting drug use, a person living with HIV/AIDS, a person who has received a blood transfusion/or blood products, or sex with a bisexual male (females only). Therefore, cases whose only risk history is heterosexual sex who cannot specify partner risk are placed in the “No Identified Risk” category. This becomes more of an issue as IDUs and persons infected via heterosexual contact account for increasing proportions of AIDS cases.

❑ **Changes in the logistics of HIV/AIDS case reporting:**

As HIV/AIDS becomes more of an outpatient disease due to advances in treatment, ascertainment of risk behaviors has become more complex. Fewer patients are hospitalized, thereby reducing opportunity to follow-up on cases without risk identifiers. Previously, hospitalization provided a frequent venue for case follow-up. In addition, more cases are reported from laboratories, which typically have no contact with patients.

Figure 4 provides an estimate of AIDS incidence by transmission mode, by proportionately redistributing cases without identified risk into each risk category. This picture suggests a more substantial increase among heterosexual contact cases, with relative declines among MSM and IDU.

AIDS Incidence by Gender

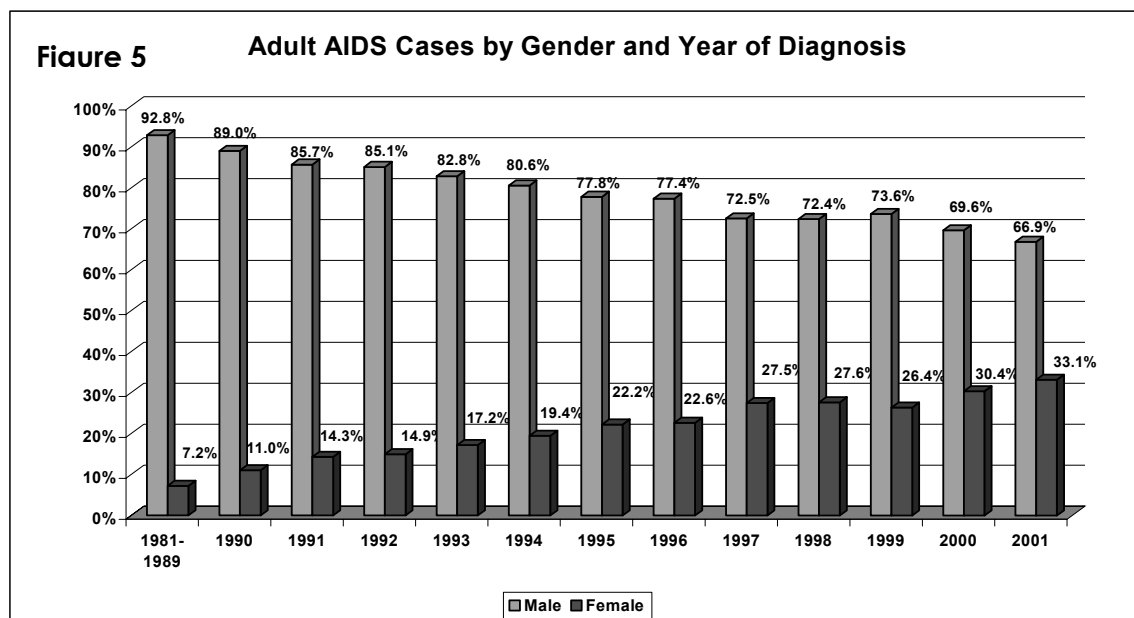


Table 5.

Diagnosis Years	Adult Males	Adult Females	Total Adults	Female to Male Ratio
1981-1989	2315	179	2494	1 to 12.9
1990-1995	8270	1339	9609	1 to 6.2
1996-2001	3516	1316	4832	1 to 2.7

Figure 5 illustrates AIDS incidence by gender and year of diagnosis. This chart indicates that AIDS incidence is growing fastest in women. Over the past decade, the proportion of cases among women increased threefold: In 1991, 11% of AIDS incidence in 1991 occurred among women. In 2001, the proportion of cases among women was 33%. In contrast, AIDS incidence in men declined from 89% to 66.7% during this period.

Table 5 illustrates the female to male ratio of AIDS cases over 3 time periods. During the first decade of the epidemic, the female to male ratio was 1 to 12.9 (1 female for every 12.9 males). Between 1990 and 1995, the ratio decreased to 1 to 6.2 (1 female for every 6.2 males). Between 1996 and 2001, the ratio decreased again to 1 to 2.7 (1 female for every 2.7 males). This marked decline in the female to male ratio also indicates that AIDS incidence is growing fastest in women, as compared to men.

Both of these charts support the indication that IDU and heterosexual contact account for increasing proportions of AIDS incidence as illustrated in Figure 4.

Table 6. AIDS Cases in Adult Females by Race/Ethnicity and Mode of Transmission: 1990-2001

Adult Females	African American/Black		Hispanic/Latina		White		Total ¹	
	#	%	#	%	#	%	#	%
IDU	1111	48.7%	6	17.6%	47	51.1%	1166	48.2%
Het. Sex w/IDU	250	11.0%	<5	<14.7%	<5	<1%	255	10.6%
Het. Sex w/Bi Male	24	1.1%	5	14.7%	<5	<1%	32	1.3%
Het. Sex w/Recipient Blood Prod.	33	1.4%	0	0.0%	<5	<1%	35	1.4%
Het. Sex w/ PWHA	625	27.4%	20	58.8%	24	26.1%	672	27.8%
Blood/Blood Products	32	1.4%	<5	<14.7%	<5	<1%	33	1.4%
No Identified Risk	206	9.0%	<5	<14.7%	13	14.1%	224	9.3%
TOTAL	2281	100.0%	34	100.0%	92	100.0%	2417	100.0%

¹ Total includes 10 cases of other races

Tables 6 and 7 take a closer look at transmission modes by gender and Race/Ethnicity over the last decade.

Table 6 describes AIDS incidence in women. Ninety-four percent of female AIDS cases during this period were diagnosed in African American/Black women (n=2281). Less than four percent of cases were White women, (n=92) while Hispanic/Latina women account for two percent (n=34).

IDU accounts for a majority of cases women during this period (48.2%). Cases attributed to Heterosexual contact are divided into four categories: Sex with IDU (10.6%), sex with bisexual male (1.3%), sex with recipient of Blood or Blood Products (1.4%), and sex with a person with HIV/AIDS (27.8%). It should be noted that sex with a person with AIDS might indicate sex with any of the first 3 (IDU, bisexual male or recipient of Blood /blood products). In this case, the patient did not specify partners' risk behavior.

Blood/Blood Products account for very small proportions of AIDS incidence; typically representing HIV infections that occurred a decade or more prior to development of AIDS definina illness.

Table 7. AIDS Cases in Adult Males by Race/Ethnicity and Mode of Transmission: 1990-2001

Adult Males	African American/Black		Hispanic/Latino		White		Total ¹	
	#	%	#	%	#	%	#	%
MSM	3136	47.07%	226	67.7%	1581	88.0%	4973	56.3%
IDU	2109	31.66%	27	8.1%	67	3.7%	2204	25.0%
MSM/IDU	384	5.76%	12	3.6%	73	4.1%	469	5.3%
Het. Sex w/IDU	239	3.59%	11	3.3%	6	0.3%	256	2.9%
Het. Sex w/ PWHA	412	6.18%	30	9.0%	25	1.4%	467	5.3%
Het. Sex w/ Recipient Blood Prod.	6	0.09%	<5	<1.5%	0	0.0%	7	0.1%
Blood/Blood Products	26	0.39%	<5	<1.5%	13	0.7%	41	0.5%
No Identified Risk	350	5.25%	28	8.4%	32	1.8%	413	4.7%
TOTAL	6662	100.00%	334	100.0%	1797	100.0%	8830	100.0%

¹ Total Includes 35 cases of other races

Table 7 describes AIDS incidence in males over the last decade. Although 56% of cases overall were diagnosed in MSM, the proportion of cases in this category varies widely by race/ethnicity. In white men, 88% of cases were MSM. By contrast, 47% of cases in African American men were MSM, while the proportion of cases among Hispanic/Latino MSM was 67%. Nearly 1/3 of cases in African American/Black men were heterosexual IDUs, compared to 8.1% of Hispanic/Latino males and 3.7% of White males.

The proportion of MSM/IDU cases was 5.3% among all men. African American/Black males represented a slightly larger percentage, while the percentage among White and Hispanic/Latino men was slightly less.

In males, heterosexual contact cases can be divided into 3 categories: sex with IDU, sex with PWHA, and sex with recipient of Blood/Blood Products.

The proportion of heterosexual cases in white males in all categories combined in less than 2%. By contrast, 3.6% of African American/Black male heterosexual contact cases indicated sex with IDU, and 6.2% indicated sex with PWHA. Among Hispanic/Latino males, 9% indicated sex with PWHA, while 3.3 % indicated sex with IDU. The proportion of cases indicating sex with recipient of Blood/Blood Products was negligible in all racial/ethnic groups. The proportion of cases without risk identified was 4.7% overall, with significant variability between the three racial/ethnic groups.

African American/Black men account for 75.4% of AIDS cases during this period (n=6662). White men account for 20.4% (n=1797), while Hispanics/Latinos account for 3.8%.

Mode of Transmission by Race/Ethnicity

Figures 6 and 7 show that a decrease in numbers of cases does not translate to a decrease in the percentage of total number of AIDS cases for men who have sex with men. The progressive decline in numbers of cases among African American/Black and White MSM since 1993 may lead to the conclusion that the percent of African American/Black and White MSM out of total cases in the population has also declined. Figure 13 however, shows that the proportion African American/Black MSM has actually increased slightly and remained steady since 1991. The proportion of cases in White MSM to total cases has declined but at a more gradual rate than the number of cases would seem to indicate. The effects described here among African American/Black and White MSM can only occur if the number of cases among all other exposure categories has declined at a higher rate than among African American/Black and White MSM.

Figure 6

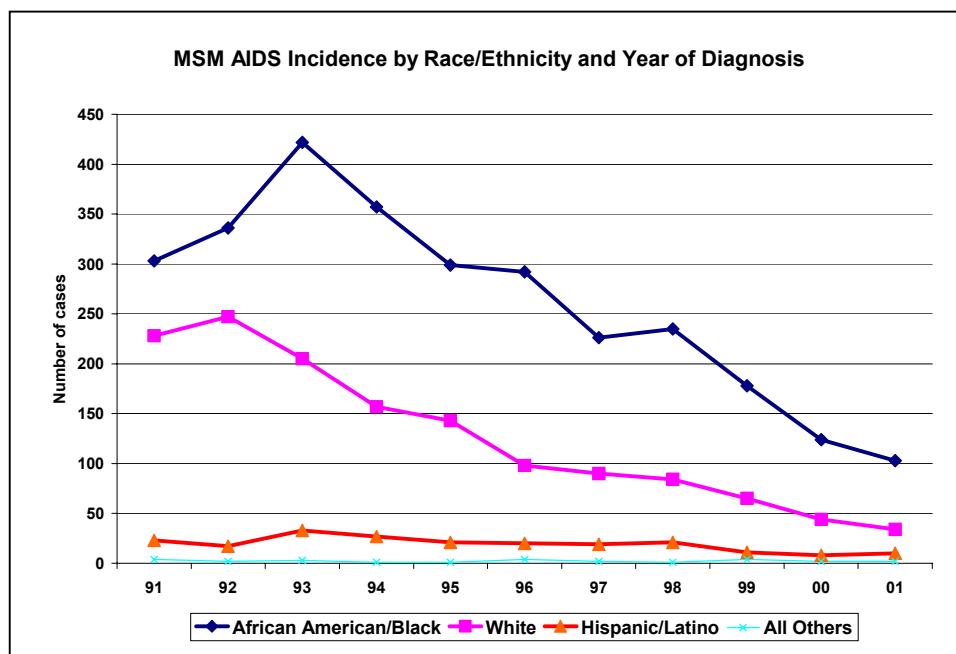
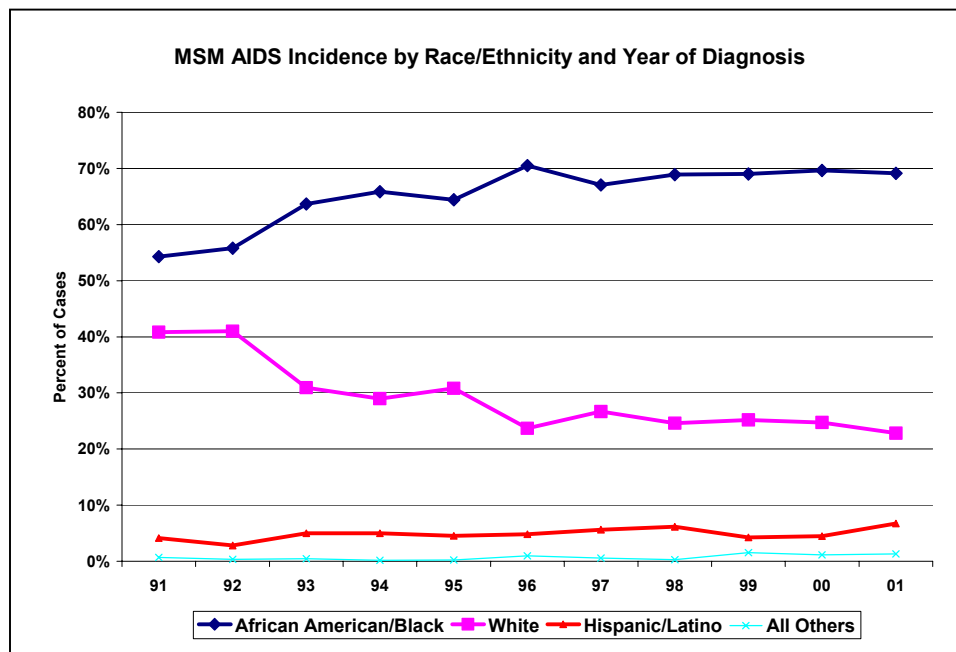


Figure 7.



Among men who have sex with men who are also intravenous drug users, Figure 8 shows that the number of AIDS cases has declined from 48 in 1991 to 11 cases in 2001. As was shown among African American/Black MSM, the number of cases has fallen in the ten-year period but the percentage of cases has actually been gradually increasing. Figure 15 tells us that although the number of cases among African American/Black MSM/IDU has fallen, the decrease does not equal the decrease that must be occurring among other racial groups and exposure categories, including White MSM/IDU. The line tracing number of cases among White MSM/IDU closely mirrors the line for percent of cases. Figures 8 and 9 tell the same story for the African American/Black population as compared to White population in this exposure category; that a steady decline in number of cases among one group does not change the disparity that existed in the beginning. The Black / African American population in this exposure category, MSM/IDU, is disproportionately effected by the disease.

Figure 8

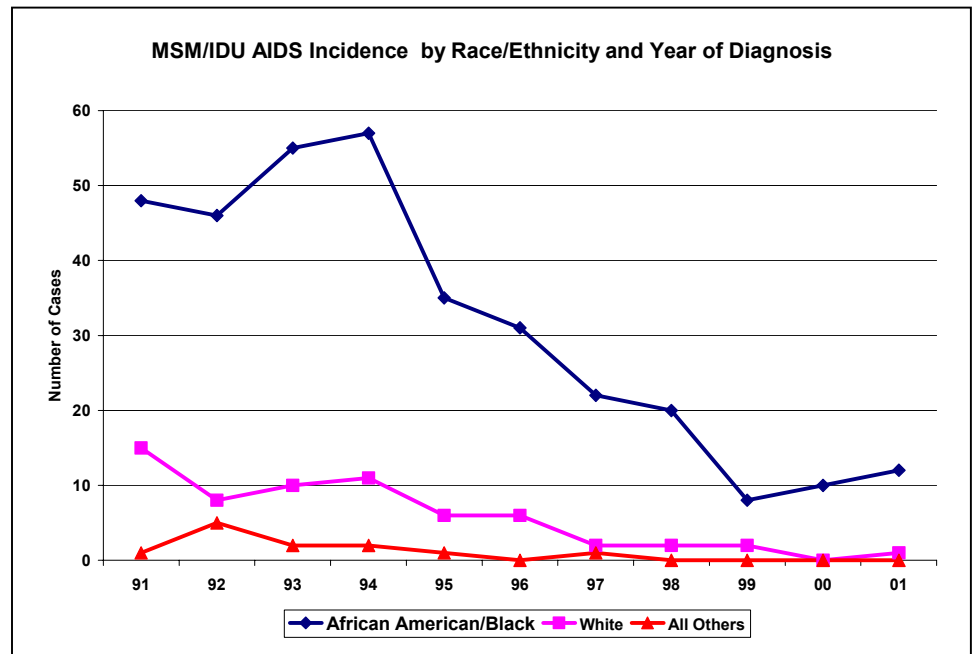


Figure 9

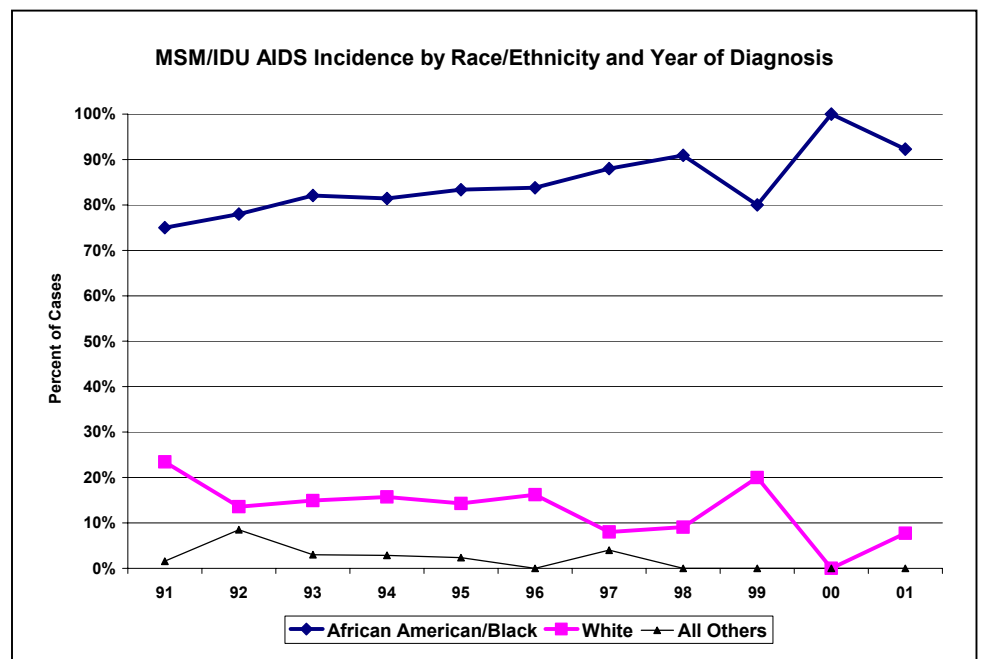


Figure 10

Figure 10 tracks the number of cases by race among men who contracted the disease through injecting drug use. The gradual incline in cases from 1991 to 1994 and the steady decline from 1996 through 2001 is NOT reflected in the proportion of total cases shown in Figure 11. Figure 11 shows that among all male cases transmitted via IDU, African/American Blacks make up over 90% of total cases. This proportion has changed very little from 1991 to 2001. The racial disparity that was shown among MSM and MSM/IDU is also very much present among male intravenous drug users.

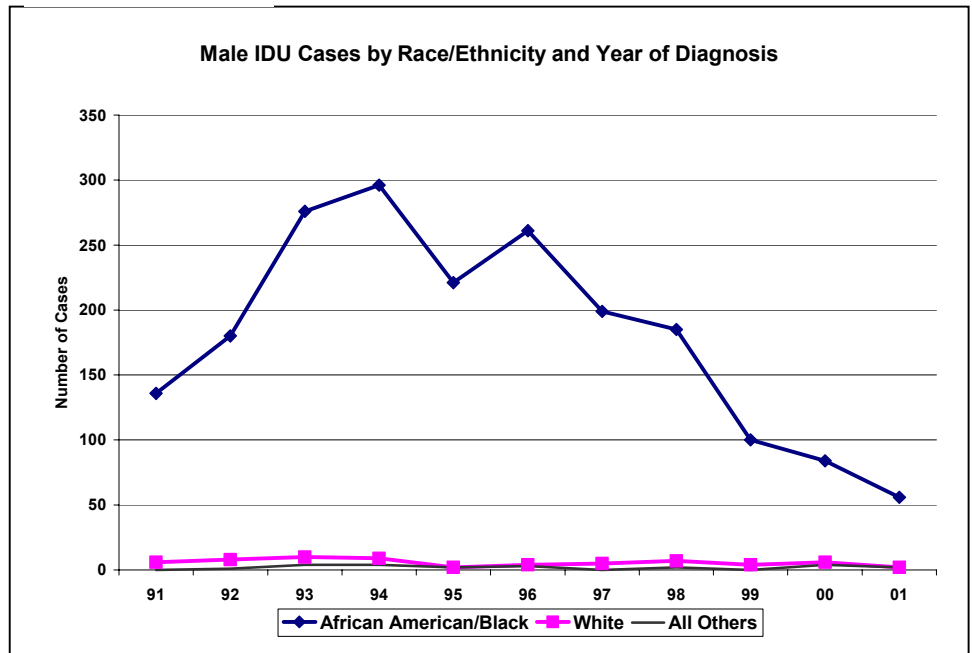


Figure 11

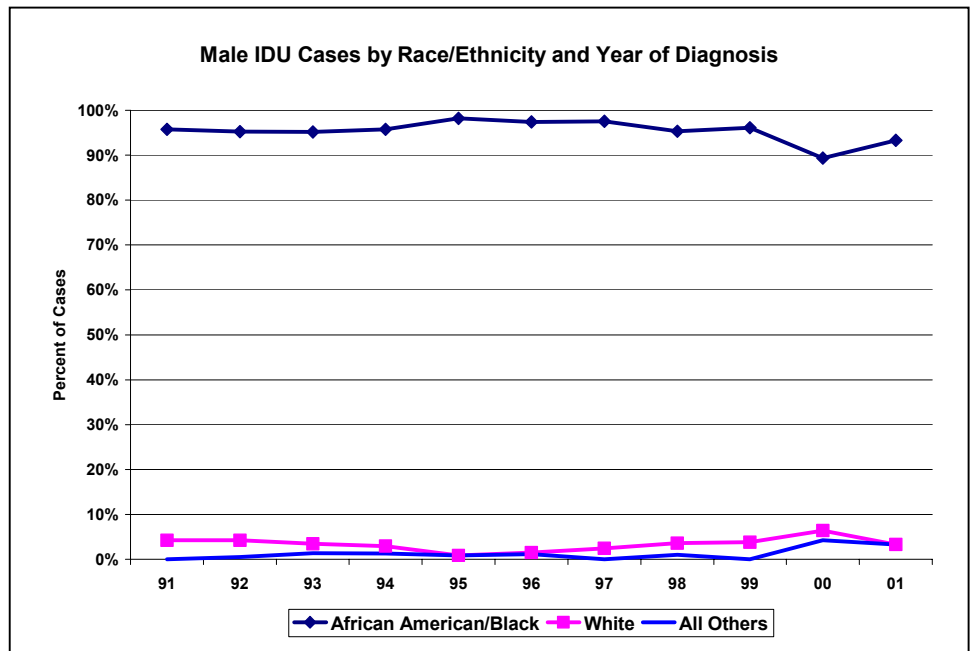


Figure 12

Among female Injecting drug users, Figures 12 and 13 closely resemble Figures 10 and 11. Thus, the racial disparity among IDUs exists across gender lines. The percentage of cases among African American/Black females has remained at or above 90% from 1991 to 2001. The increase in number of cases from 1991 to 1994 among females in this exposure category was also present among males as seen in Figure 18 compared to Figure 16. The sharp decline from 1994 to 1995 is seen in both male and female IDU among the African American/Black population, indicating that prevention efforts or other factors impacted both males and females to an equal degree. As in male IDU cases among African American/Blacks, female African American/Black cases have steadily declined since 1996. The percentage of cases, however, has remained high among this racial group as compared to all others.

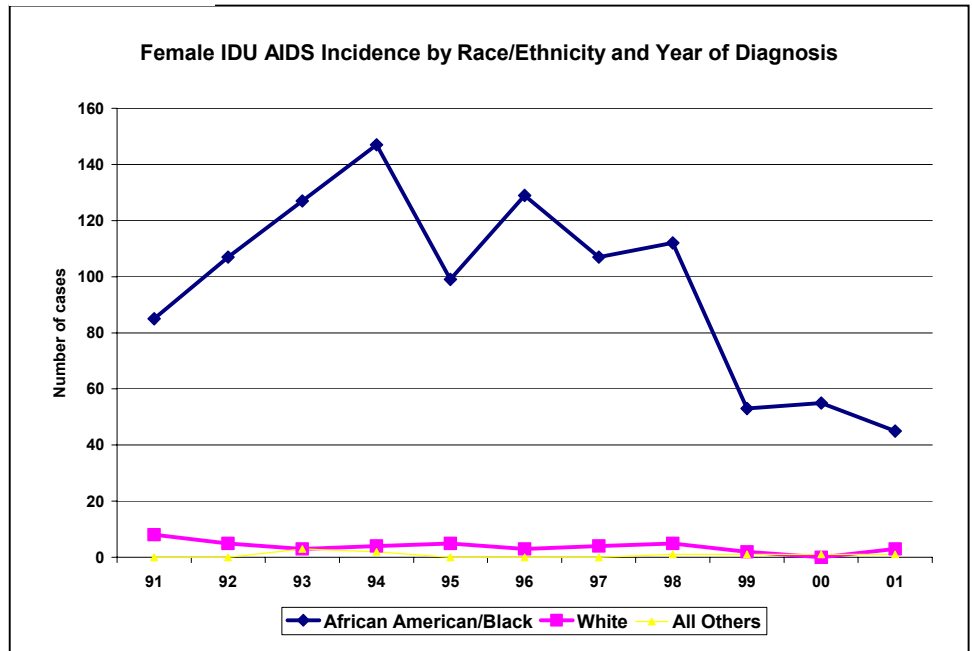


Figure 13.

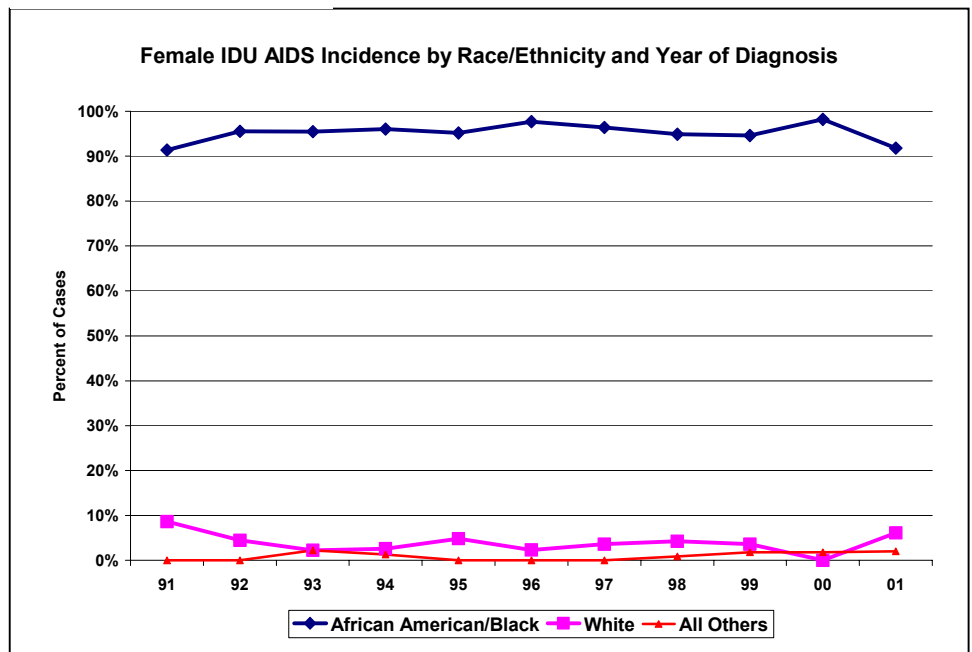


Figure 14

Figures 14 and 15 look at cases by heterosexual transmission among males. We can immediately see that African American/Blacks make up a majority of the cases in this exposure category. The number of cases and percent of cases for Whites are collapsed into the category "All Others." "Black males comprise anywhere from 82% to 99% of total cases during this ten year period. The jump in number of cases among African American/Black from 1994 to 1996 is not translated to a jump in percentage of cases overall because most likely there was an increase in the number of cases among males in all other races. Again, these two figures show that the disparity that existed in 1991 still exists in 2001.

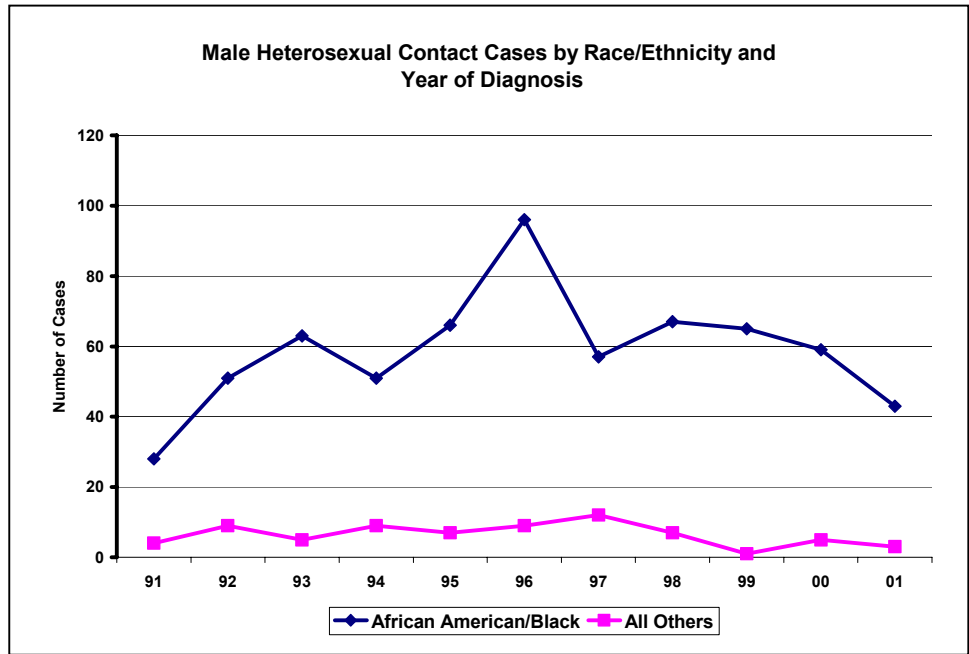


Figure 15

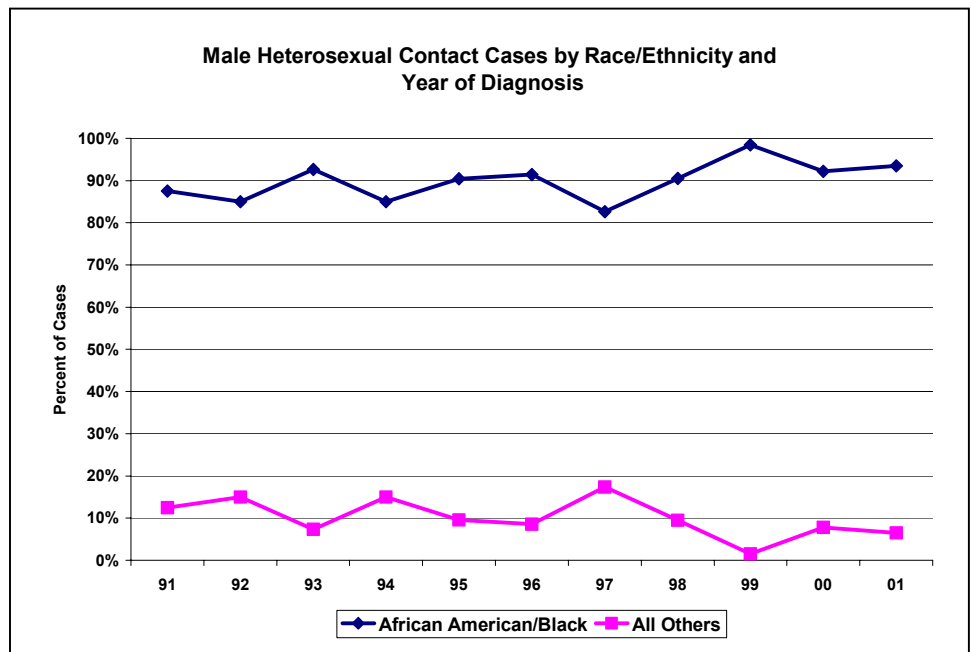


Figure 16

Figures 16 and 17 show similar trends and differences for female heterosexual contact cases. Among African American / Blacks the large increase in number of cases from 1992 to 1993 and 1994 to 1995 is not reflected in the percentage of cases overall. Percentage of cases for Black / African American females have hovered around 90% throughout the ten year period. The disparity that exists for African American/black males also exists for females and leads to proportionate numbers of females contracting HIV/AIDS through heterosexual contact.

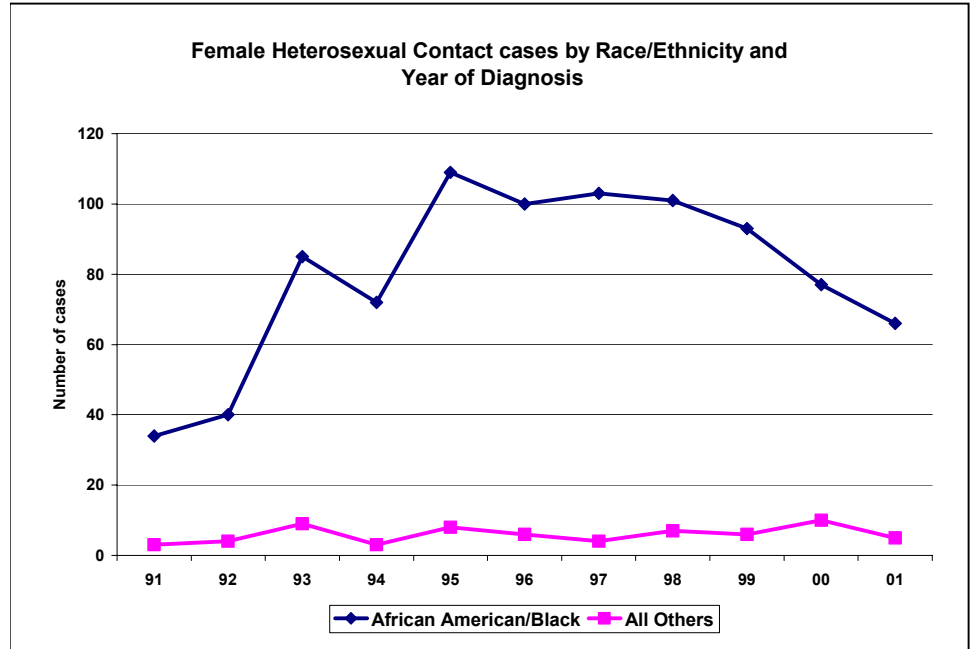
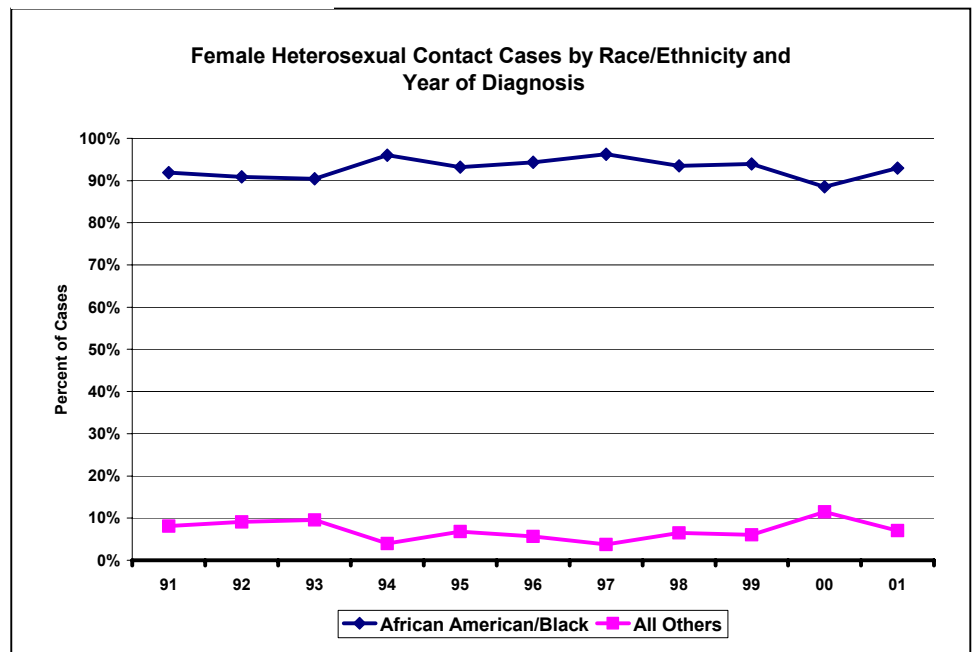
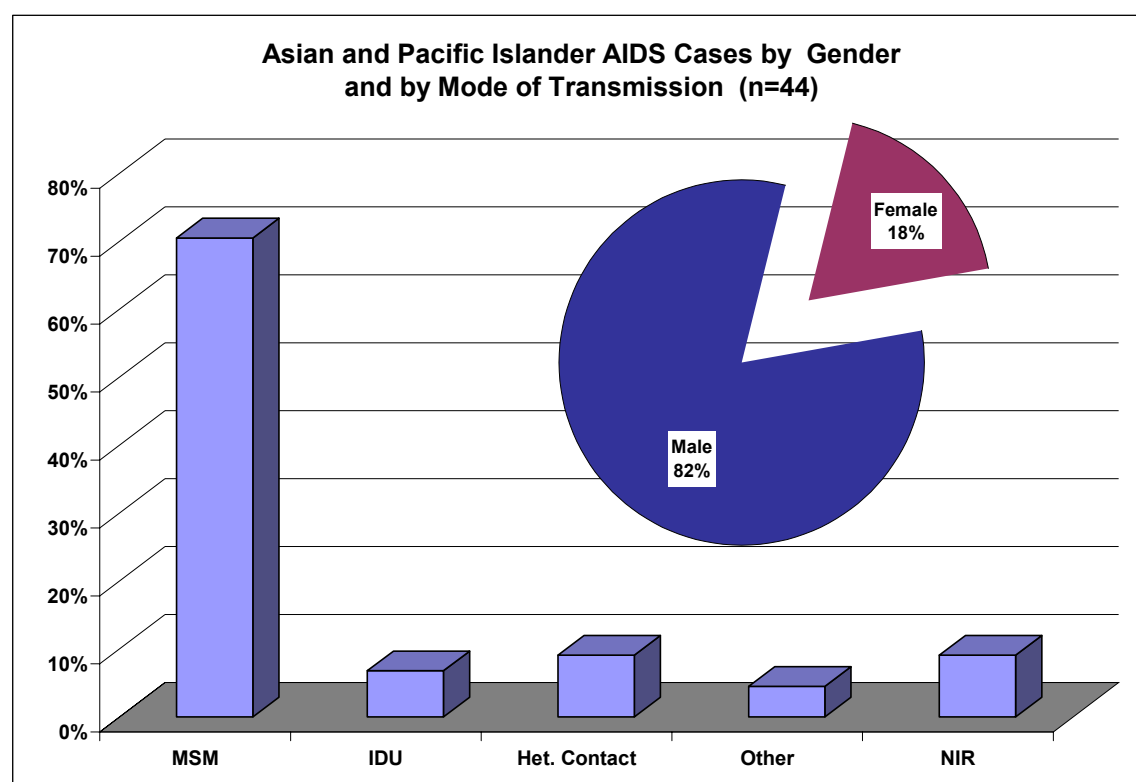


Figure 17



AIDS Incidence in Asian and Pacific Islander Populations



Through December 2001, a total of 44 AIDS cases had been reported in Asian and Pacific Islanders. These account for less than one percent of cumulative AIDS incidence in the District of Columbia, while Asian and Pacific Islanders account for 2.8% of the population. Ten cases (23%) are deceased, leaving a total of 24 living as of December 2001.

This relatively small number of cases makes it difficult to analyze trends in the context of other racial ethnic groups with large numbers of cases. However, it is noteworthy that cumulative AIDS incidence in this population has nearly doubled over the past five years: through December 1995, 23 cases had been diagnosed in this population. Between 1996 and 2001, an additional 20 cases were reported. By contrast, the proportion of new cases declined substantially among District of Columbia residents overall during this period.

Figure 18 (above) illustrates the distribution of AIDS cases by mode of transmission and by gender. MSM represent the largest group by mode of transmission, accounting for 70.5% of cases (n=31). Fewer than five cases are attributed to each of the remaining categories: IDU, Heterosexual contact, other and NIR (No Identified Risk). Eighty-two percent of cases are males (n=36), while 18 percent are females (n=8).

During the first decade of the epidemic, all of the cases reported among Asian and Pacific Islander residents were MSM. The emergence of cases among women has been comparatively recent, with most of these reported since 1995.

The profile of AIDS in this District of Columbia population is similar to the national picture: Asian/Pacific Islanders comprise 3.8% of the US population and .75% of cumulative AIDS incidence in the US. Rates of AIDS incidence among Asian/Pacific Islanders in the US vary substantially by US region and by country of origin. National studies point to the importance of using additional data such as surrogate markers and behavioral surveillance to further describe HIV/AIDS related risks in this population. In addition, it is important to look at the growth of the epidemic in addition to absolute numbers. In the case of the District of Columbia, cumulative AIDS incidence has nearly doubled in this population over the past five years.

AIDS Incidence by Age Group

Table 8.

AIDS Cases by Age Group				
Age Group	1980-2001		1996-2001 only	
	#	%	#	%
0-12	174	1.3%	39	0.8%
13-24	529	3.8%	183	3.8%
25-34	4525	32.6%	1315	27.1%
35-49	7146	51.4%	2655	54.7%
50+	1509	10.9%	664	13.7%
Unknown	16	0.1%	0	0.0%
Total	13899	100.0%	4856	100.0%

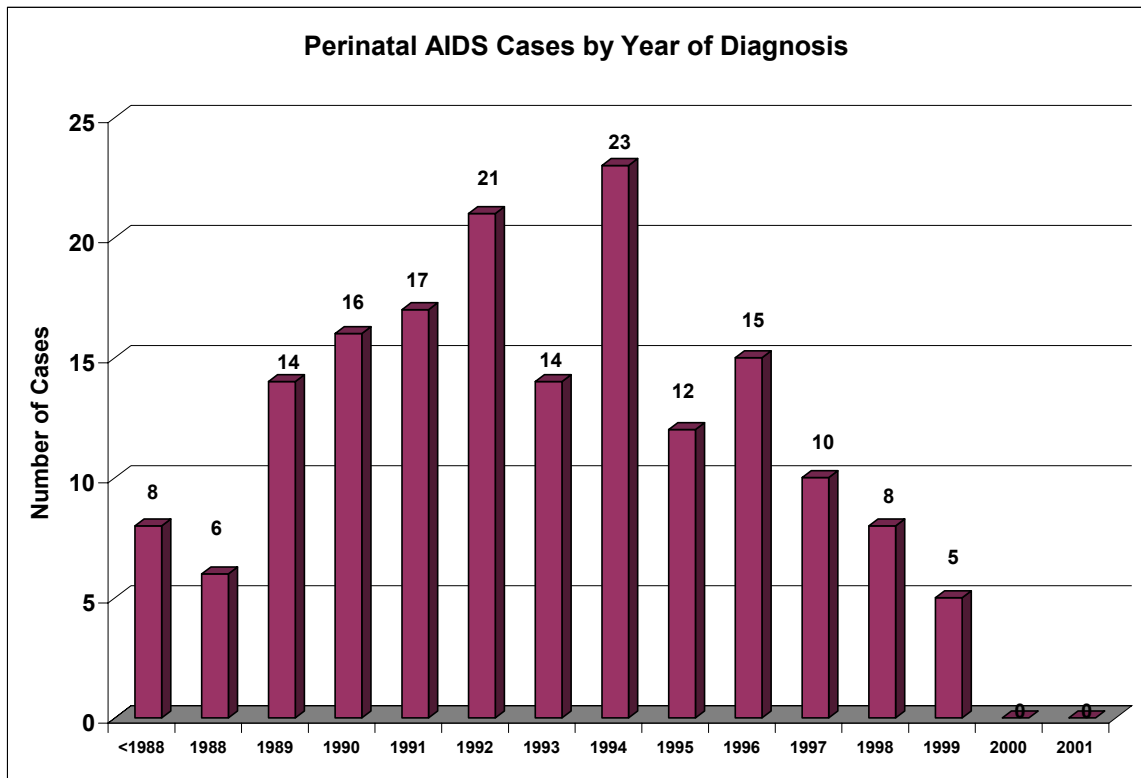
Table 8 describes AIDS incidence by Age Group. The distribution of AIDS cases by age group has remained relatively constant over time. Table 8 compares cumulative AIDS incidence to AIDS cases diagnosed between 1996 and 2001. This shows a slight decline in pediatric cases (0-12 year olds). This population represents 1.3% of AIDS incidence overall, compared to 0.8% of recent cases. The proportion of 13-24 year old cases between the two periods remains unchanged (3.8% and 3.7% respectively).

The proportion of cases in 25 to 34 year olds declined. Between 1996 and 2001, this group represented 27.1% of cases, as compared to 32.6% over the 20-year period. The proportion of cases in persons 35-49 year olds increased slightly, accounting for 54.7 percent of 1996-2001 cases, as compared to 51.4% of cumulative cases. The proportion of cases in persons over 50 also increased. Persons over 50 accounted for 13.7% of cases diagnosed between 1996 and 2001, compared to 10.9% of cumulative incidence (1981-2001). National studies have suggested that increases in AIDS incidence among older populations is a reflection of people with HIV living longer before developing AIDS defining illness.

Pediatric HIV/AIDS in the District of Columbia

Since the beginning of the epidemic, A Total of 172 cases of AIDS have been reported in children less than 13 years of age in the District of Columbia. Ninety six percent of these were infected perinatally (N=166). Both in the US and in the District of Columbia, the incidence of pediatric AIDS has declined dramatically since 1996 due to the increased use of antiretroviral therapies for HIV positive pregnant women.

District of Columbia Pediatric AIDS Cases reported through 12/31/2001



2001 data not complete due to reporting delay.

Pediatric AIDS Surveillance

Since the beginning of the epidemic, a total of 172 cases of AIDS have been reported in children less than 13 years of age in the District of Columbia. Ninety six percent of these were infected perinatally (N=166). Both in the US and in the District of Columbia, the incidence of pediatric AIDS has declined dramatically since 1996 due to the increased use of antiretroviral therapies for HIV positive pregnant women.

Pediatric HIV Surveillance

The District has implemented HIV surveillance with unique identifier system as of December 2001. Implementation of HIV surveillance will help the District to better understand the magnitude of HIV/AIDS epidemic among children.

Since the District recently implemented HIV reporting, data from Pediatric Spectrum of Diseases (PSD) project has been used to estimate the proportion of children born to HIV-infected women. PSD is a CDC coordinated HIV surveillance project initiated in 1989 that has been tracking HIV exposed and HIV infected children in the D.C. metropolitan area. This project involves medical record review of HIV exposed and HIV infected children.

Estimated number of HIV Exposed and HIV Infected Infants

Table 9

Birth Year	Number of HIV Exposed Infants	Number of HIV Infected Infants
1999	97	9
2000	78	<5
*2001	71	<5

SOURCE: PSD Project. 2001 data not completed.

Enhanced Perinatal HIV Surveillance (EPS) Project

To ensure further decline in perinatally acquired HIV cases, the HIV/AIDS Administration, is collaborating with CDC in the Enhanced Perinatal HIV Surveillance project. EPS project is a population based surveillance system for HIV-infected mothers and their perinatally exposed children at all major birthing hospitals in the District of Columbia. The project's main goal is to achieve maximum reduction in perinatally acquired HIV cases in the District of Columbia.

EPS project will enable the Department of Health to gather more complete information on HIV infected mother and HIV exposed infant pairs, gauge access to care, assess geographic differences, and collect supplemental data.

This project will try to attain this goal by evaluating the completeness of pediatric HIV/AIDS case reporting and by implementing the guidelines set by the U.S. Public Health Services to routinely counsel and voluntarily test pregnant women for HIV and to offer Zidovudine therapy to all infected mothers and exposed infants.

AIDS Incidence Among Persons Over 50

Persons over 50 years old account for 10.9% of the 13,899 AIDS cases reported through December 31, 2001. Among cases reported between 1996 and 2001, (n=4856) persons over 50 account for 13.7%. The larger proportion of cases in this population among recent cases indicates the epidemic is growing in persons over 50. Table 10 (below) describes AIDS incidence by gender and mode of transmission.

AIDS in Persons over 50	Cumulative (10.9% of Reported cases)						Recent (13.7% of Reported Cases)					
	Male		Female		Total		Male		Female		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
MSM	664	51.7%	0	0.0%	664	44.0%	205	38.1%	0	0.0%	205	30.9%
IDU (Heterosexual)	335	26.1%	87	38.8%	422	28.0%	177	32.9%	43	34.1%	220	33.1%
MSM/IDU	46	3.6%	0	0.0%	46	3.0%	17	3.2%	0	0.0%	17	2.6%
Heterosexual Contact	125	9.7%	99	44.2%	224	14.8%	58	10.8%	56	44.4%	114	17.2%
All Others	21	1.6%	12	5.4%	33	2.2%	1	0.2%	3	2.4%	4	0.6%
No Identified Risk	94	7.3%	26	11.6%	120	8.0%	80	14.9%	24	19.0%	104	15.7%
Total	1285	100.0%	224	100.0%	1509	100.0%	538	100.0%	126	100.0%	664	100.0%

Cumulatively, the risk category of MSM represents a majority of total cases, with a percentage of total cases equaling 51.7%. The next largest risk category is IDU (Heterosexuals) which represents 28.0% of all cases cumulatively. In recent cases these two percentages have changed and are now 30.9% of cases for MSM and 33.1% of cases for IDU (Heterosexuals). So while the percentage of cases overall among MSM has declined in recent years, the percentage of cases among IDU (Heterosexuals) has remained constant in recent years.

The larger proportion of cases without risks identified among recent cases makes increases and/or declines among the various transmission modes difficult to interpret.

AIDS Incidence Among Homeless Persons

A total of 571 AIDS cases have been classified as homeless at the time of diagnosis. These represent 4.1% of the 13,899 cases reported through December 2001. Among the 4295 cases reported between 1996 and 2001, homeless individuals account for 7.8% of the total. The larger proportion of homeless individuals among recent cases suggests that AIDS incidence is growing in the homeless population.

Tables 14 and 15 describe AIDS incidence among homeless persons by gender, race/ethnicity, and mode of transmission. Women account for 95 cases or 17.9% of cumulative AIDS incidence. Among more recently reported cases, the proportion of women is slightly less (58 cases or 79.7%). African Americans account for the majority of cumulative incidence among the homeless (87.8%), followed by Whites (7.0%), and Hispanics/Latinos (4.7%). The distribution of AIDS cases by race/ethnicity remains relatively unchanged for recently diagnosed cases, with slight decreases among African Americans/Blacks and a slight increase among Hispanics/Latinos.

Figure 14

	Cumulative Incidence (1980 - 2001)					
	Males		Females		Total	
	#	%	#	%	#	%
MSM	137	29.8%	0	0.0%	137	24.7%
IDU	163	35.4%	58	61.1%	221	39.8%
MSM/IDU	42	9.1%	0	0.0%	42	7.6%
Heterosexual Contact	78	17.0%	25	26.3%	103	18.6%
No Identified Risk	39	8.5%	12	12.6%	51	9.2%
All Other Adults	1	0.2%	0	0.0%	1	0.2%
Total	460	100.0%	95	100.0%	555	100.0%
White (non-Hispanic)	32	6.8%	8	8.1%	40	7.0%
African American/Black	415	87.9%	86	86.9%	501	87.7%
Latino/Hispanic	24	5.1%	5	5.1%	29	5.1%
All Others Adults	1	0.2%	0	0.0%	1	0.2%
Total	472	100.0%	99	100.0%	571	100.0%

Figure 15

	Recent Incidence (1996 - 2001)					
	Males		Females		Total	
	#	%	#	%	#	%
MSM	58	25.4%	0	0.0%	58	20.3%
IDU	74	32.5%	25	43.1%	99	34.6%
MSM/IDU	15	6.6%	0	0.0%	15	5.2%
Heterosexual Contact	43	18.9%	22	37.9%	65	22.7%
No Identified Risk	37	16.2%	11	19.0%	48	16.8%
All Other Adults	1	0.4%	0	0.0%	1	0.3%
Total	228	100.0%	58	100.0%	286	100.0%
White (non-Hispanic)	<18	<8%	<5	<7%	20	5.9%
African American/Black	231	99.6%	61	89.7%	292	86.6%
Latino/Hispanic	<22	<11%	<5	<7%	22	6.5%
All Others Adults	1	0.4%	2	2.9%	3	0.9%
Total	232	100.0%	68	100.0%	337	100.0%

The proportion of cases with no identified risk among recent incidence (16.8%) complicates interpretation of trends by mode of transmission. With this limitation in mind, the distribution of cases by mode of transmission is described below:

MSM account for the 24.7% of cumulative AIDS incidence, compared to 20.3% of cases diagnosed between 1996 and 2001. Injecting drug users account for 39.8% of cumulative AIDS incidence, compared to 34.6% of recent incidence. MSM/IDU among recently diagnosed cases (5.2%) is slightly less than cumulative incidence in this population (7.6%).

Heterosexual contact cases account for 22.7% of recent cases as compared to 18.6% of cumulative incidence.

AIDS Incidence Among Incarcerated Persons

Figure 16

	Cumulative Incidence (1981 - 2001)					
	Males		Females		Total	
	#	%	#	%	#	%
MSM	82	17.0%	0	0.0%	82	14.9%
IDU	313	64.9%	55	80.9%	368	66.9%
MSM/IDU	40	8.3%	0	0.0%	40	7.3%
Heterosexual Contact	37	7.7%	10	14.7%	47	8.5%
No Identified Risk	10	2.1%	3	4.4%	13	2.4%
All Other Adults	0	0.0%	0	0.0%	0	0.0%
Total	482	100.0%	68	100.0%	550	100.0%
White (non-Hispanic)	5	1.0%	1	1.5%	6	1.1%
African American/Black	484	97.8%	67	98.5%	551	97.9%
Latino/Hispanic	6	1.2%	0	0.0%	6	1.1%
All Others Adults	0	0.0%	0	0.0%	0	0.0%
Total	495	100.0%	68	100.0%	563	100.0%

A total of 563 AIDS cases were incarcerated at the time of diagnosis. These represent 4.1% of the 13,899 cases reported through December 2001. Among the 4295 cases reported between 1996 and 2001, incarcerated individuals account for 7.1% of the total. The larger proportion of incarcerated individuals among recent cases suggests that AIDS incidence is growing in this population.

Tables 16 and 17 describe AIDS incidence among incarcerated persons by gender, race/ethnicity, and mode of transmission. Women account for 68 cases or 12.4% of cumulative AIDS incidence. Among more recently reported cases, the proportion of women is essentially unchanged (31 cases or 87.8%).

Blacks / African Americans account for the majority of cumulative incidence among the incarcerated. (97.9%). Whites and Hispanics/Latinos each account for 1.1% or 6 cases. The distribution of AIDS cases by race/ethnicity remains relatively unchanged for recently diagnosed cases.

Figure 17

	Recent Incidence (1996-2001)					
	Males		Females		Total	
	#	%	#	%	#	%
MSM	45	20.1%	0	0.0%	45	17.6%
IDU	135	60.3%	22	71.0%	157	61.6%
MSM/IDU	9	4.0%	0	0.0%	9	3.5%
Heterosexual Contact	27	12.1%	8	25.8%	35	13.7%
No Identified Risk	8	3.6%	1	3.2%	9	3.5%
All Other Adults	0	0.0%	0	0.0%	0	0.0%
Total	224	100.0%	31	100.0%	255	100.0%
White (non-Hispanic)	<5	<1.9%	<5	<13%	<5	<1.6%
African American/Black	263	97.4%	37	97.4%	300	98.4%
Latino/Hispanic	5	1.9%	0	0.0%	5	1.6%
All Others Adults	<5	<1.9%	<5	<13%	<5	<1.6%
Total	270	100.0%	38	100.0%	305	100.0%

Reliability of risk behavior information for incarcerated cases may be questionable, in view of the dynamics of acknowledging behaviors such as illegal drug use or same sex behavior during incarceration. With these limitations in mind, the distribution of cases by mode of transmission is described below:

MSM account for the 17.6% of cumulative AIDS incidence, compared to 20.3% of cases diagnosed between 1996 and 2001. People with a history of IDU account for 66.9% of cumulative AIDS incidence, compared to 61.6% of recent incidence. MSM/IDU among recently diagnosed cases (3.5%) is less than half the cumulative incidence in this population (7.3%).

Heterosexual contact cases account for 13.7% of recent cases as compared to 8.5% of cumulative incidence.

Surrogate Markers: Sexually Transmitted Disease Data

The Relationship of STD Detection and Treatment in HIV Prevention

Surrogate Markers are substitute measures used to describe disease risk when actual measures are unavailable, or difficult to obtain. Since the District of Columbia recently began HIV reporting in 2001, surrogate markers, such as STDs, are even more important as substitute measures to assess risk for HIV infection. STD surveillance data can assist in forecasting increased HIV rates among certain population according to demographic factors such as age group, sex, and race. The use of STD surveillance data can provide a more immediate assessment of risk behavior in populations because symptoms, as a result of unprotected sexual behavior, may be manifested and detectable within several days. Although STDs frequently go unrecognized by infected individuals, prevention efforts should emphasize awareness of symptoms and encourage routine testing.

In comparison, HIV infection remains dormant for an average of ten years before specific symptoms emerge. Therefore, STD trends can provide a glimpse into where the HIV rates are likely to increase. Thus, better coordination and linkages between HIV and STD planning efforts can assist in implementing strategies for HIV/AIDS prevention among specific populations. Moreover, recognizing that the use of improved STD surveillance data can be an effective tool used by HIV prevention community planning groups in profiling HIV.

Biological Susceptibility and Infectiousness

The presence of other STDs increases the infectiousness and susceptibility to HIV infection. Several studies have shown that genital ulcers (syphilis, herpes, chancroid) permit HIV entry via breaks in the genital tract lining and skin (*Role of STD Detection and Treatment in HIV Prevention*, 2001). Non-ulcerative STDs (chlamydia and gonorrhea) increase the concentration of cells in genital secretions that serve as targets for HIV (CD4+ cells), increasing a person's susceptibility. In addition, inflammatory STDs (gonorrhea and chlamydia infections) increase the prevalence of HIV shedding and "viral load" in genital secretions. Hence, STDs are probable indicators of HIV infectiousness (CDC Advisory Committee MMWR, 1998). It is important for early screening and treatment of curable STDs to reduce the increased likelihood of contracting and transmitting HIV.

Recommendations for HIV and STD Prevention

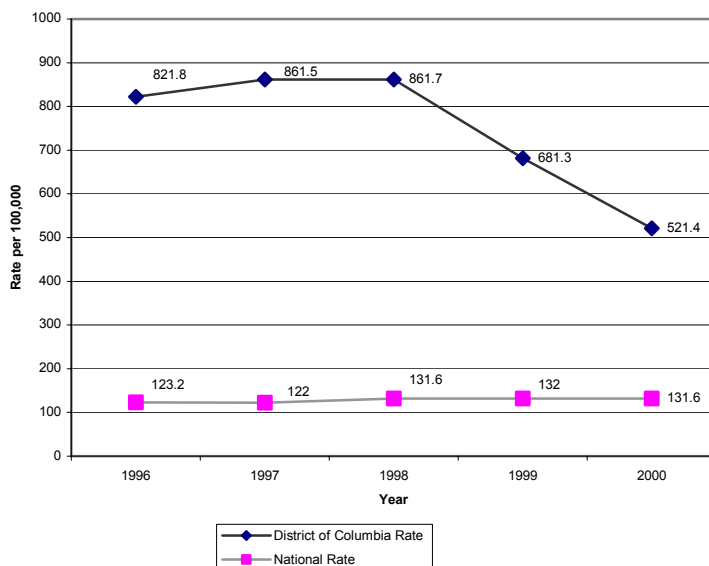
According to the 1998 CDC Advisory Committee on HIV and STD Prevention (ACHSP) the following are recommendations for linking sexually transmitted disease and HIV infection prevention strategies:

- Early detection and treatment of STDs of sexually transmitted disease is an effective strategy for preventing sexually transmitted HIV infection
- Persons with STDs have a two-to-five fold increased risk for HIV infection
- A higher prevalence of HIV co-infection "exists among persons with any STDs than among person without STDs or a history of STDs." Consequently, interventions targeted to persons with STDs or a STD history are intrinsically targeted to persons with a higher prevalence of and at higher risk of HIV infection."

District of Columbia Sexually Transmitted Disease Rates 1996-2000

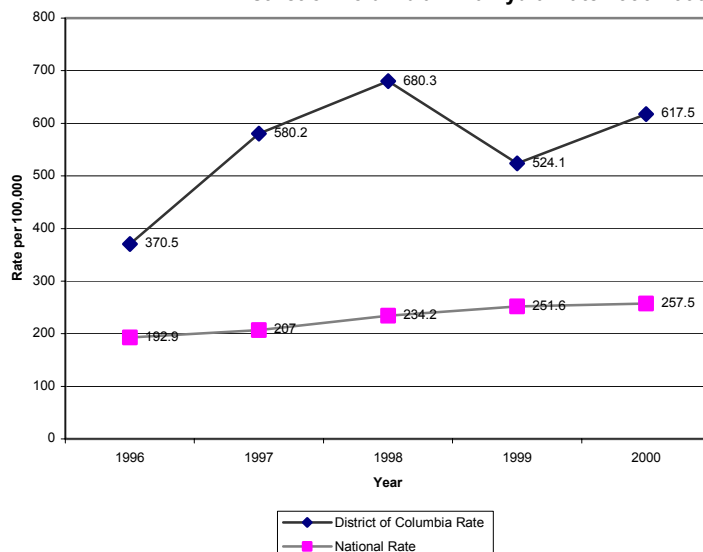
In 2000, for cities greater than 200,000 population, the District of Columbia ranked 13th in each category of sexually transmitted disease for rates of gonorrhea, chlamydia, primary and secondary syphilis per 100,000 population. The District of Columbia ranked 14th for congenital syphilis rate.

District of Columbia Gonorrhea Rate 1996-2000



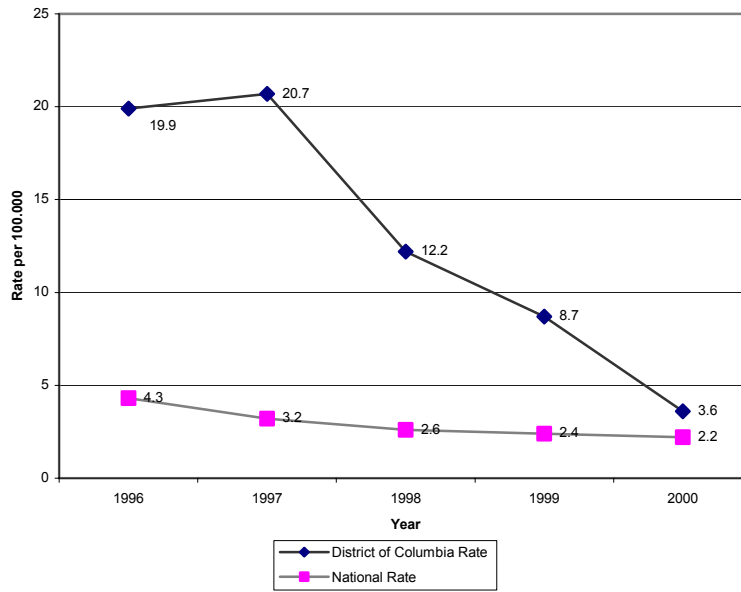
	District of Columbia Rate	National Rate
1996	821.8	123.2
1997	861.5	122
1998	861.7	131.6
1999	681.3	132
2000	521.4	131.6

District of Columbia Chlamydia Rate 1996-2000



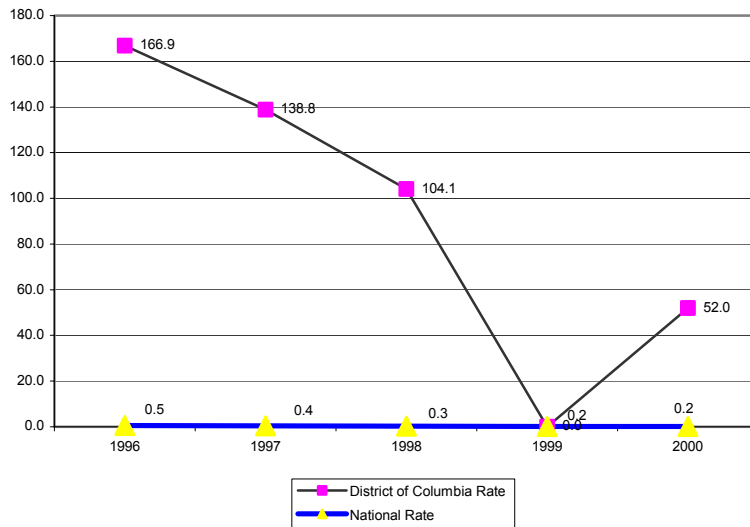
	District of Columbia Rate	National Rate
1996	370.5	192.9
1997	580.2	207
1998	680.3	234.2
1999	524.1	251.6
2000	617.5	257.5

District of Columbia Primary and Secondary Syphilis Rate 1996-2000



	District of Columbia Rate	National Rate
1996	19.9	4.3
1997	20.7	3.2
1998	12.2	2.6
1999	8.7	2.4
2000	3.6	2.2

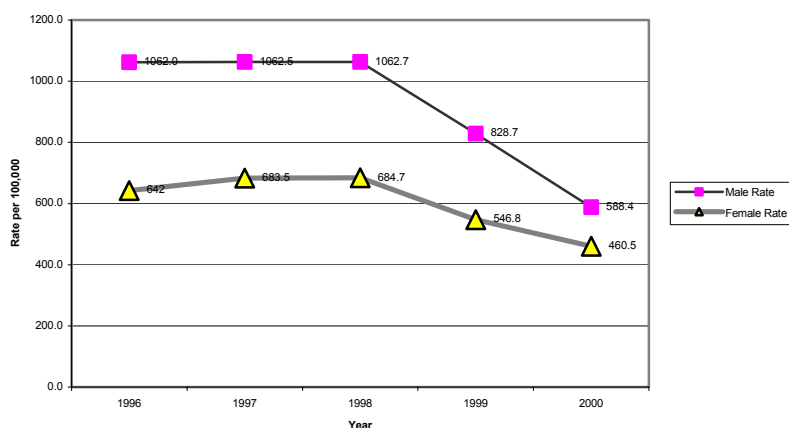
District of Columbia Congenital Syphilis Rate 1996-2000



Year	District of Columbia Rate	National Rate
1996	166.9	0.5
1997	138.8	0.4
1998	104.1	0.3
1999	0.0	0.2
2000	52.0	0.2

District of Columbia Sexually Transmitted Disease Cases and Rates by Sex 1996-2000

District of Columbia Gonorrhea Rate by Sex 1996-2000



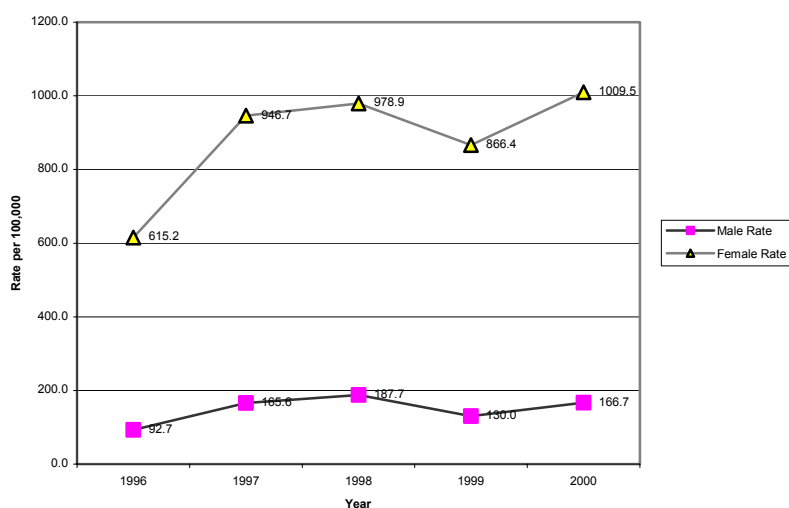
	Gonorrhea			
Year	Male Cases	Male Rate	Female Cases	Female Rate
1996	2591	1062.0	1841	642
1997	2637	1062.5	1919	683.5
1998	2604	1062.7	1904	684.7
1999	2014	828.7	1509	546.8
2000	1430	588.4	1271	460.5

*Rate per 100,000

District of Columbia Gonorrhea

Although rates of gonorrhea increased in 13 of 20 cities surveyed by the CDC in 2000, the District seems to be on a downward trend in the number of reported cases. Among both men and women the number of gonorrhea cases reported in the District have been in decline since 1998; from 2604 cases for men in 1998 to 1430 cases in 2000, and 1904 cases for women in 1998 to 1271 cases in 2000. This may reflect safer sex practices by both men and women. Prevention campaigns in the District of Columbia can cite such numbers to support funding for campaigns for safer sex. It is critical to continue prevention efforts among men because gonorrhea infection in men correlates to gonorrhea rates among females, in turn, predisposing both populations to HIV infection via heterosexual contact. In terms of targeting populations, rectal gonorrhea among MSMs can function as a significant indicator of the potential for HIV transmission. Males that are infected with gonorrhea and HIV are more than twice as likely to shed HIV in their genital secretions than those who are infected only with HIV (*Role of STD Detection and Treatment in HIV Prevention*, CDC 2001).

District of Columbia Chlamydia Rate 1996-2000



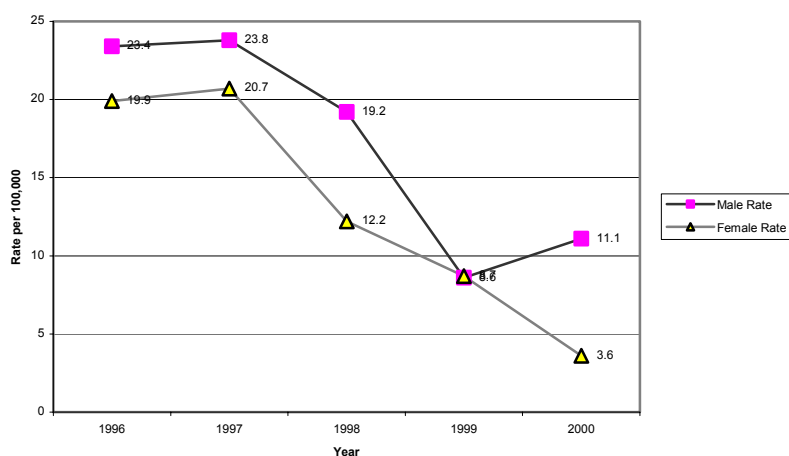
	Chlamydia			
Year	Male Cases	Male Rate	Female Cases	Female Rate
1996	234	92.7	1764	615.2
1997	411	165.6	2658	946.7
1998	460	187.7	2722	978.9
1999	316	130.0	2391	866.4
2000	405	166.7	2786	1009.5

*Rate per 100,000

District of Columbia Chlamydia

Chlamydia cases have remained fairly steady among men in the District. There was a slight decline in the number of cases among men from 1998 to 1999, followed by a slight increase from 1999 to 2000. The number of cases among women declined by more than 300 from 1998 to 1999 but then rose again to 2786 in 2000. The disease predominantly affects women rather than men. According to a recent CDC report, *Tracking the Hidden Epidemics, Trends in STDs in the United States*, women infected with chlamydia are three-to-five times more likely to become infected with HIV if exposed.

District of Columbia Rate of Primary and Secondary Syphilis by Sex

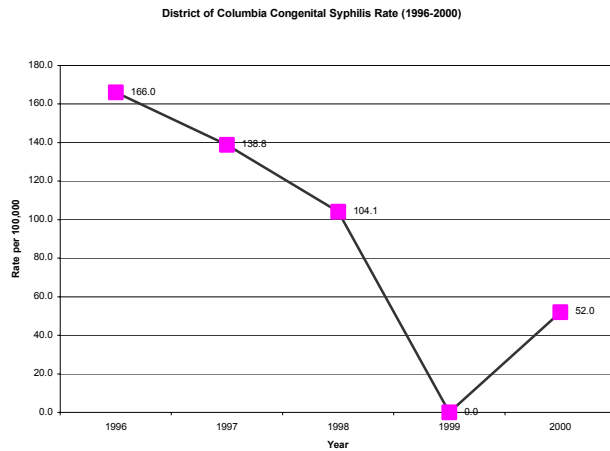


	Primary and Secondary Syphilis			
Year	Male Cases	Male Rate	Female Cases	Female Rate
1996	59	23.4	57	19.9
1997	59	23.8	58	20.7
1998	47	19.2	34	12.2
1999	21	8.6	24	8.7
2000	27	11.1	10	3.6

*Rate per 100,000

District of Columbia Primary and Secondary Syphilis

The syphilis rate among women between 1996 and 2000 represents the most dramatic decline (82%) in sexually transmitted diseases in the District of Columbia. This is seen best by the rate per 100,000 in women in 1998, 12.2, and the most recent rate in 2000 or just 3.6. Men have seen a similar but less drastic decline (52.6%), decreasing from 19.2 per 100,000 in 1998 to 11.1 in 2000. Syphilis causes genital sores in adults, which permit easier transmittance and susceptibility of HIV. As a result, there is a two-to-five-fold increased risk of acquiring HIV infection while syphilis is present (*Syphilis Fact Sheet*, CDC 2001). A study focusing on female IDUs, identified syphilis as a risk factor for acquiring new HIV infection, which suggests that sexual transmission could account for an unrecognized subset of new HIV infections in this group (CDC Advisory Committee, 1998).



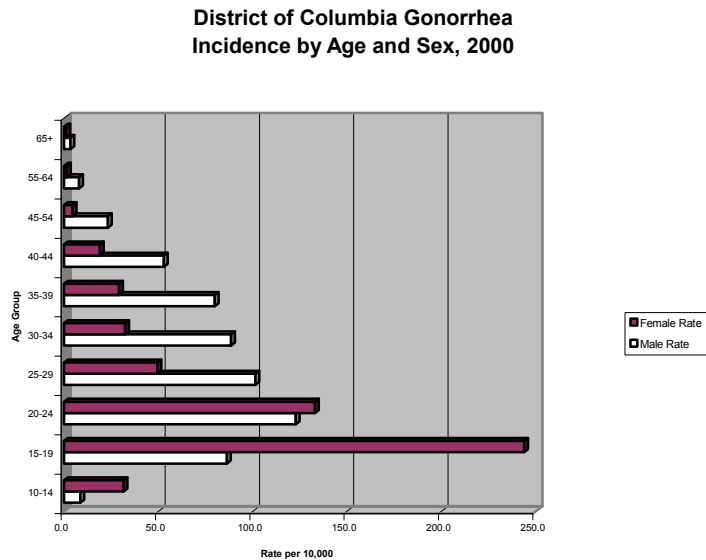
	Congenital Syphilis	
Year	Cases	Rate
1996	14	166.9
1997	11	138.8
1998	8	104.1
1999	0	0.0
2000	4	52.0

*Rate per 100,000

District of Columbia Congenital Syphilis (CS)

The syphilis rate among infants has declined 69.0% from 1996 to 2000. In 1996, 14 cases (166.0 per 100,000) were reported in the District of Columbia, compared to only 4 cases (52.0 per 100,000) in 2000. The decrease in CS cases is closely related to the trends in primary and secondary syphilis among women of reproductive age, which declined 71% between 1996 and 2000. In 1998, the CDC initiated a national syphilis elimination effort in the United States, which may be associated with the decline in CS rates in the District of Columbia as a result of improved interventions in prevention, treatment, and detection. Although the District of Columbia has met the 2000 health objective to reduce the rate of CS to less than 40 cases per 100,000 live-born, efforts continue to meet the 2010 objective of eliminating CS within the District of Columbia and United States (MMWR, July 13, 2001).

2000 District of Columbia Sexually Transmitted Disease Incidence by Age Groups



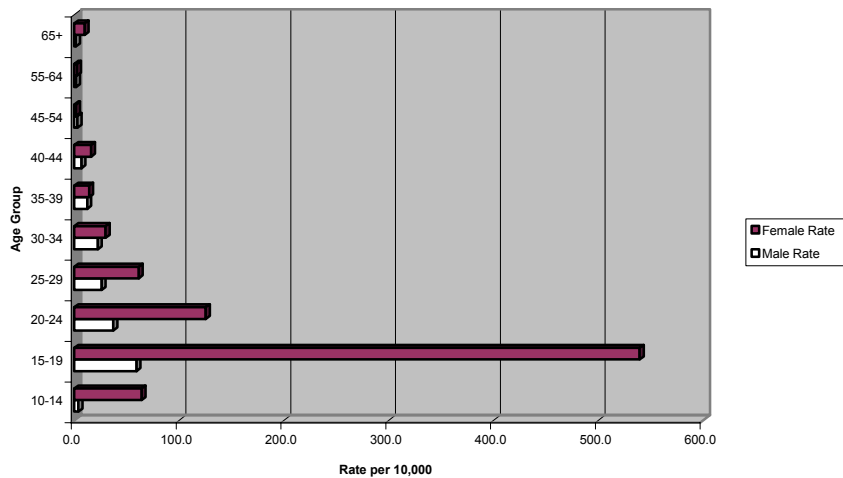
Age	Males Cases	Female Cases	Male Rate	Female Rate	Gender Total Rate
10-14	13	47	8.6	31.5	20.0
15-19	204	484	113.2	243.8	181.7
20-24	310	375	122.9	133.0	132.2
25-29	256	137	101.5	49.6	74.4
30-34	217	79	88.5	32.4	60.5
35-39	187	66	79.9	29.3	55.1
40-44	109	40	52.9	18.9	35.7
45-54	82	18	23.2	4.5	13.3
55-64	18	4	7.9	1.5	4.4
65+	9	5	3.4	1.2	2.0

*Rate per 10,000

2000 U.S. Census Population

For males and females over 24 years old, the gonorrhea rate among males is significantly higher than females, approximately three male cases for every single female case. Conversely, among males and females under 25 years old, the gonorrhea rate among females is higher than males. For example, among females (15-19) the gonorrhea rate is 243.8 compared to 113.2 for males. In comparing the female to male ratio of incidence (243.8:113.2;), for every single male case of gonorrhea there are 2.1 female cases. Females (15-19) are two times as likely to have contracted gonorrhea than males. The inverse relationship of gonorrhea rates among males over 24 years old and females under 25 years old, may correlate to younger females having older male sex partners, suggesting that higher gonorrhea rates among older males correlates to the higher gonorrhea rate among younger females. Additionally, the higher gonorrhea rates among older males may contribute to the increased rates of gonorrhea infection among young MSM whose partners are older men.

**District of Columbia Chlamydia Incidence
by Age and Sex, 2000**



Age	Male Cases	Female Cases	Male Rate	Female Rate	Total Gender Rate
10-14	6	96	4.0	64.3	34.0
15-19	107	1071	59.4	539.5	311.1
20-24	88	354	37.3	125.5	189.3
25-29	66	170	26.2	61.6	79.5
30-34	55	73	22.4	29.9	46.0
35-39	29	32	12.4	14.2	22.2
40-44	14	34	6.8	16.1	11.0
45-54	11	7	3.1	1.8	6.0
55-64	4	7	1.8	2.6	2.2
65+	4	43	1.5	9.9	1.6

*Rate per 10,000

2000 U.S. Census Population

Chlamydia is the most common STD in the District of Columbia, specifically among women (15-19). The highest age-specific rates of chlamydia occurred among 15-to-24

year old adolescent males (46.8 per 10,000) and females (408.7 per 10,000). The chlamydia rate among females (15-19) is two times the rate of gonorrhea. The chlamydia rate among females (15-19) is 539.5 compared to 59.4 for males. For every one male case of chlamydia there are 9.1 female cases. Females (15-19) are nine times as likely to have contracted chlamydia than males. The lower proportion of men suggests that the sex partners of women with chlamydia are not diagnosed or reported (2000 National STD Surveillance Report).

2000 District of Columbia Distribution of STDs Among Youth (15-24)

Young Women

African-American females (15-24) represent a disproportionately high prevalence of STDs, which mirrors the increased numbers of AIDS cases among women through heterosexual contact in the District of Columbia. Prevention efforts should continue to meet the Advisory Committee for HIV and STD Prevention (ASHSP) recommendations of requiring all sexually active females under 25 years old visiting health-care providers for any reason to be screened for chlamydia and gonorrhea at least once a year.

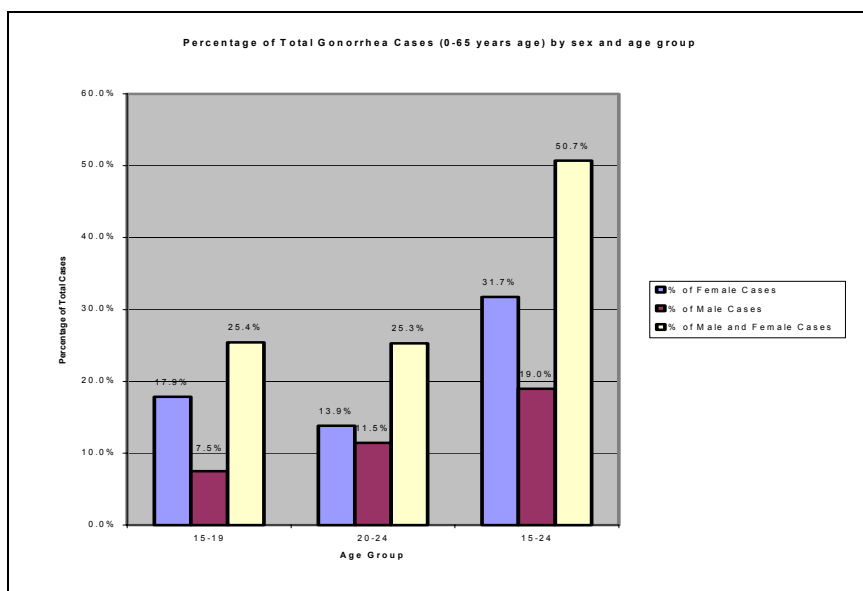
Young Men

According to (ASHSP), the presence of other STDs continues to be an important indicator of seroconversion among young MSM. In relation, the increasing proportion of AIDS cases via sexual transmission among young women re-emphasizes the importance of routine screening because the proportion of STDs that show no symptoms is higher in men than women. This suggest that all young sexually active men (15-24) are at high risk for HIV infection and other STDs and are a critical population to target for routine STD and screening. ASHSP recommends that all young sexually active men should be screened routinely for chlamydia and gonococcal infections due to the new diagnostic tests, which use urine as a specimen for screening.

Higher- Risk Groups

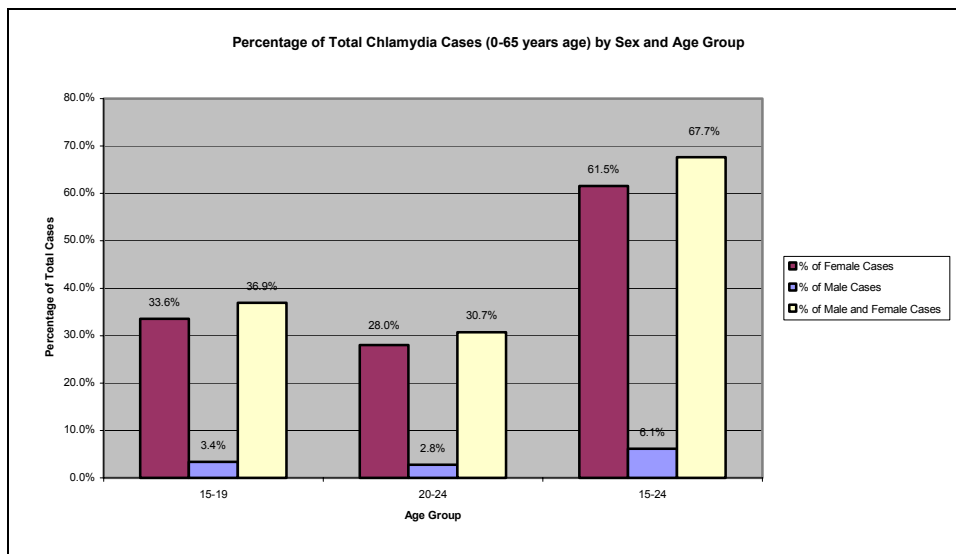
Chlamydia and gonorrhea screening should be administered at least once per year to older higher-risk males and females such as substance abusers, persons with a history of STDs or more than one sex partner per year, correctional facilities, and from wards with high STD rates.

Although screening and treatment are methods for lowering the risk of sexually transmitted diseases leading to HIV infection, prevention efforts need to continue to address the behavioral attributes contributing to disease transmission.



The percentage of female, male, and combined male and female cases by age group of total gonorrhea cases (n=2707) in the District of Columbia, January 1, 2000-December 31, 2000.

In the District of Columbia, females (15-24) represent a higher percentage, 31.7% compared with males 19.0% of total gonorrhea cases. Males and females (15-24) contribute to approximately, 50% of the total number of gonorrhea cases in the District of Columbia.



The percentage of female, male, and combined male and female cases by age group of total chlamydia cases (n=3191) in the District of Columbia, January 1, 2000-December 31, 2000.

The distribution of chlamydia cases among 15-24 year old males and females is higher than the percentages of gonorrhea cases in the District of Columbia. Females (15-24) represent 61.5% of the total number of gonorrhea cases in the District of Columbia, which is two times the percentage of gonorrhea cases (31.7%) within the specific age group. Adolescent males and females (15-24) contribute to 67.7% of chlamydia cases.

2001 District of Columbia STDs by Sex and Ward

Primary and Secondary Syphilis (2001)				Gonorrhea (2001)				Chlamydia (2001)			
Ward	Male	Female	Total	Male	Female	Unknown	Total	Male	Female	Unknown	Total
1	40	10	50	241	118	1	360	47	271	1	319
2	43	15	58	165	106	0	271	39	207	0	246
3	5	3	8	22	9	1	32	5	35	0	40
4	29	19	48	96	74	1	171	30	189	2	221
5	44	34	78	282	185	0	467	40	295	3	338
6	49	15	64	193	133	1	327	38	227	0	265
7	42	35	77	174	197	0	371	29	312	0	341
8	41	34	75	258	185	3	446	29	329	3	361
Unknown	2	2	4	199	236	8	443	196	949	19	1164
Total	295	167	462	1630	1243	15	2888	453	2814	28	3295

2001 District of Columbia STD Rates by Sex and Ward

Ward	Primary and Secondary Syphilis			Gonorrhea			Chlamydia		
	Male Rate	Female Rate	Total Rate	Male Rate	Female Rate	Total Rate	Male Rate	Female Rate	Total Rate
1	9.9	2.5	6.2	59.6	29.8	30.2	11.6	68.5	39.7
2	10.4	3.6	7.0	40.1	25.4	19.9	9.5	49.7	29.7
3	1.4	0.7	1.0	6.2	2.0	2.9	1.4	7.9	5.0
4	8.8	5.0	6.7	29.0	19.3	13.6	9.1	49.4	30.7
5	14.4	9.5	11.7	92.0	51.5	42.4	13.1	82.2	50.3
6	15.0	4.6	9.8	59.0	40.6	29.6	11.6	69.3	40.5
7	14.8	9.6	11.9	61.4	54.2	26.9	10.2	85.8	52.7
8	14.9	10.0	12.2	93.7	54.4	42.4	10.5	96.8	58.2

Source: 2000 Census Bureau
Per 10,000 population

In 2001, Ward 3 had the lowest total rate for primary and secondary syphilis (1.0 per 10,000), gonorrhea (2.9 per 10,000), and chlamydia (7.9 per 10,000). In contrast, Ward 8 ranked highest for total gonorrhea and chlamydia rates. For primary and secondary syphilis, Ward 8 ranked highest for female (14.9) and males (10.0) rates. The gonorrhea rate was highest in Ward 7 (54.2) and Ward 8 (54.4) among females. Males in Ward 8 represented the highest gonorrhea rate (93.7). Females in Ward 8 and males in Ward 5 contributed to the highest chlamydia rates.

ⁱ National Minority AIDS Council, *Understanding the Basics: HIV Prevention Community Planning*, Washington, DC 2001

ⁱⁱ National Minority AIDS Council, *Understanding the Basics: HIV Prevention Community Planning*, Washington, DC 2001

ⁱⁱⁱ Unpublished data, District of Columbia department of Health, HIV/AIDS Administration